# AN ECONOMIC ANALYSIS OF THE U.S. HONEY INDUSTRY: 

## DATA DOCUMENTATION

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## AN ECONOMIC ANALYSIS OF THE U.S. HONEY INDUSTRY: DATA DOCUMENTATION

## INTRODUCTION

The U.S. honey industry is undergoing a period of rapid change. The industry has concern about the possible effects of the infiltration of Africanized honey bees into the United States and what those bees might mean for honey production and providing pollination services. Varroa mites have heightened the industry's awareness of the potential effects of spreading bee diseases and parasites on the migratory behavior of beekeepers and the package bee and queen bee industry. There is continuing concern about the influence of pesticides on bees as they forage for food and pollinate crops. The effects of changing the federal honey price support program has industry participants anxious about the ability to maintain a positive cash flow in the future. Industry support of the National Honey Board, which has taken a role in promoting the use of honey in domestic and export markets, is strong. Finally, honey producers, packers, importers and brokers want to insure that all consumers receive a high quality product that is void of chemical alteration or pesticide residues.

To assist in identifying these issues and other issues that are of concern to the U.S. honey industry an economic study of the national honey industry was recommended and funded by the National Honey Board and the U.S. Department of Agriculture in 1989. This study, conducted by Cornell University, had two major components. The first emphasis was on a survey of the national honey industry. The purpose of the survey was to collect information to identify the needs and current economic status of the honey industry. The second emphasis of the research was to develop and expand an economic model of the national honey industry to aid in understanding the economic relationships in the industry. This model was to be used for simulation analysis of alternative
scenarios. The results were to be interpreted and implications for the industry were to be identified.

This report is one in a series of reports that summarizes the research on the economic analysis of the industry. In this report, the survey data from the national honey industry survey is documented. Each question in the survey is identified. The responses are detailed. Computer coding of the response is identified. The number of each response is reported. Its percent recorded. The mean, median, standard deviation, minimum and maximum value of each response are presented. A copy of the survey instrument is in the appendix.

Other Cornell University reports included in the series that details the economic analysis of the industry include works (1) describing the survey sample and the type of mailing used, (2) summarizing the data obtained from the survey, (3) identifying the raw data obtained from the analysis and (4) describing the economic model and scenario analyses. Additional works are to be published through the U.S. Department of Agriculture's publication series and in beekeeping trade journals.

|  |  |  | Number of Responses | Percent of Total |  |  | Standard |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Question | Response | Value | Responses |  | Mean | Median | Deviation | m | Maximum |

How would you classify yourself in the honey industry?

| a. Producer | Not Circled Circled | 0 | 38 | 5.0 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 716 | 95.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.95 | 1 | 0.22 | 0 | 1 |
| b. Packer | Not Circled Circled | 0 | 620 | 82.2 |  |  |  |  |  |
|  |  | 1 | 134 | 17.8 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.18 | 0 | 0.38 | 0 | 1 |
| c. Importer | Not Circled Circled | 0 | 737 | 97.7 |  |  |  |  |  |
|  |  | 1 | 17 | 2.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.02 | 0 | 0.15 | 0 | 1 |
| d. Broker | Not Circled Circled | 0 | 741 | 98.3 |  |  |  |  |  |
|  |  | 1 | 13 | 1.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.02 | 0 | 0.13 | 0 | 1 |

SECTION A. PRODUCERS
I. FIRM CHARACTERISTICS

1) Is beekeeping your: (Please circle ONE response.)

| a. | Full time profession | 1 | 278 | 36.9 |
| :--- | :--- | ---: | ---: | ---: |
| b. | Part time profession | 2 | 248 | 32.9 |
| c. | Hobby | 3 | 177 | 23.5 |
|  |  | Blank | 51 | 6.8 |
|  |  | TOTAL | 754 | 100.0 |

2) What state do you consider the primary headquarters for your beekeeping operation

| AK | 1 | 0.1 |
| :--- | :---: | :---: |
| AL | 14 | 1.9 |
| AR | 11 | 1.5 |
| AZ | 19 | 2.5 |
| CA | 50 | 6.6 |
| CO | 8 | 1.1 |
| CT | 1 | 0.1 |
| DC | 0 | 0.0 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}

| Number of |
| :---: |
| Responses | \& | Percent of |
| :---: |
| Total | \& Mean


 Median 

Standard <br>
Deviation Minimum
\end{tabular} Maximum

| DE | 0 | 0.0 |
| :---: | :---: | :---: |
| FL | 46 | 6.1 |
| GA | 13 | 1.7 |
| HI | 0 | 0.0 |
| IA | 30 | 4.0 |
| ID | 12 | 1.6 |
| IL | 11 | 1.5 |
| IN | 7 | 0.9 |
| KS | 6 | 0.8 |
| KY | 1 | 0.1 |
| LA | 7 | 0.9 |
| MA | 2 | 0.3 |
| MD | 2 | 0.3 |
| ME | 3 | 0.4 |
| MI | 48 | 6.4 |
| MN | 39 | 5.2 |
| MO | 8 | 1.1 |
| MS | 13 | 1.7 |
| MT | 21 | 2.8 |
| NC | 10 | 1.3 |
| ND | 21 | 2.8 |
| NE | 18 | 2.4 |
| NH | 1 | 0.1 |
| NJ | 1 | 0.1 |
| NM | 2 | 0.3 |
| NV | 2 | 0.3 |
| NY | 26 | 3.4 |
| OH | 33 | 4.4 |
| OK | 4 | 0.5 |
| OR | 23 | 3.1 |
| PA | 20 | 2.7 |
| RI | 0 | 0.0 |
| SC | 2 | 0.3 |
| SD | 32 | 4.2 |
| TN | 10 | 1.3 |
| TX | 40 | 5.3 |


| Question | Response | Value | Number of <br> Responses | Percent of <br> Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | UT | 11 | 1.5 |  |
|  | VA | 4 | 0.5 |  |
|  | VT | 6 | 0.8 |  |
|  | WA | 16 | 2.1 |  |
|  | WI | 40 | 5.3 |  |
|  | WV | 7 | 0.9 |  |
|  | WY | 13 | 1.7 |  |
|  | Blank | 39 | 5.2 |  |
|  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |

3) Is your actual residence in the same state as your primary beekeeping headquarters?

| a. | No | 1 | 14 | 1.8 |
| :--- | :--- | ---: | ---: | ---: |
| b. | Yes | 2 | 701 | 93.0 |
|  |  | Blank | 39 | 5.2 |
|  | TOTAL | 754 | 100.0 |  |

If no: In what state is your actual residence?

| CA | 1 | 0.1 |
| ---: | ---: | ---: |
| CO | 1 | 0.1 |
| FL | 1 | 0.1 |
| GA | 1 | 0.1 |
| MN | 1 | 0.1 |
| MO | 1 | 0.1 |
| NJ | 1 | 0.1 |
| OK | 1 | 0.1 |
| OR | 1 | 0.1 |
| TX | 1 | 0.1 |
| UT | 1 | 0.1 |
| WA | 1 | 0.1 |
| WY | 2 | 0.3 |
| Blank | 740 | 98.1 |
| TOTAL | 754 | 100.0 |


| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4) Which of the following years did you NOT have a beckeeping operation? (Circle ALL that apply.) |  |  |  |  |  |  |  |  |  |
| a. 1981 | Circled | 0 | 161 | 21.4 |  |  |  |  |  |
|  | Not Circled | 1 | 593 | 78.6 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.79 | 1 | 0.41 | 0 | 1 |
| b. 1982 | Circled | 0 | 141 | 18.7 |  |  |  |  |  |
|  | Not Circled | 1 | 613 | 81.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.81 | 1 | 0.39 | 0 | 1 |
| c. 1983 | Circled | 0 | 125 | 16.6 |  |  |  |  |  |
|  | Not Circled | 1 | 629 | 83.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.83 | 1 | 0.37 | 0 | 1 |
| d. 1984 | Circled |  | $105$ | 13.9 |  |  |  |  |  |
|  | Not Circled | $1$ | $649$ | 86.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.86 | 1 | 0.35 | 0 | 1 |
| e. 1985 | Circled | 0 | 80 | 10.6 |  |  |  |  |  |
|  | Not Circled | 1 | 674 | 89.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.89 | 1 | 0.31 | 0 | 1 |
| f. 1986 | Circled | 0 | 65 | 8.6 |  |  |  |  |  |
|  | Not Circled | 1 | 689 | 91.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.91 | 1 | 0.28 | 0 | 1 |
| g. 1987 | Circled | 0 | 55 | 7.3 |  |  |  |  |  |
|  | Not Circled | 1 | 699 | 92.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.93 | 1 | 0.26 | 0 | 1 |
| h. 1988 | Circled | 0 | 55 | 7.3 |  |  |  |  |  |
|  | Not Circled | 1 | 699 | 92.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.93 | 1 | 0.26 | 0 | 1 |

Question
Response
Value $\begin{array}{cc}\text { Number of } \\ \text { Responses }\end{array} \begin{gathered}\text { Percent of } \\ \text { Total }\end{gathered}$
Mean Median
Standard
5) We would like to know your operation's peak production history during each of the last four years and the number of working colonies you had during that time. (Please fill in the information for the years when you had a beekecping operation in the spaces provided. Write " 0 " if none.)
a. 1985 Number of colonies

| on October 1 | Non-Blank | 635 | 84.2 |
| :--- | ---: | ---: | ---: |
|  | Blank | 119 | 15.8 |
|  | TOTAL | 754 | 100.0 |

748
202
1,725
2
27,367
b. 1985 Number of working colonies at peak production

| Non-Blank | 635 | 84.2 |
| ---: | ---: | ---: |
| Blank | 119 | 15.8 |
| TOTAL | 754 | 100.0 | 79

,717
1
20,408
c. 1985 Month of the year your operation experienced peak production (beginning)

| January | 1 | 0 | 0.0 |
| :--- | ---: | ---: | ---: |
| February | 2 | 4 | 0.5 |
| March | 3 | 13 | 1.7 |
| April | 4 | 46 | 6.1 |
| May | 5 | 81 | 10.7 |
| June | 6 | 184 | 24.4 |
| July | 7 | 179 | 23.7 |
| August | 8 | 27 | 3.6 |
| September | 9 | 8 | 1.1 |
| October | 10 | 2 | 0.3 |
| November | 11 | 0 | 0.0 |
| December | 12 | 0 | 0.0 |
|  | Blank | 210 | 27.9 |
|  | TOTAL | 754 | 100.0 |

d. 1985 Month of the year your operation experienced peak production (end)

| January | 1 | 0 | 0.0 |
| :--- | ---: | ---: | ---: |
| Fcbuary | 2 | 0 | 0.0 |
| March | 3 | 0 | 0.0 |
| April | 4 | 5 | 0.7 |
| May | 5 | 16 | 2.1 |



| Question | Response | Value | Number of <br> Responses | Percent of <br> Total | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |$\quad$ Median | Standard <br> Deviation | Minimum |
| :---: | :---: | :---: | Maximum

d. 1986 Month of the year your operation experienced peak production (end)

| experienced peak production (end) |  |  |  |
| :---: | ---: | ---: | ---: |
| January | 1 | 0 | 0.0 |
| February | 2 | 0 | 0.0 |
| March | 3 | 0 | 0.0 |
| April | 4 | 6 | 0.8 |
| May | 5 | 15 | 2.0 |
| June | 6 | 56 | 7.4 |
| July | 7 | 125 | 16.6 |
| August | 8 | 178 | 23.6 |
| Scptember | 9 | 32 | 4.2 |
| October | 10 | 6 | 0.8 |
| November | 11 | 1 | 0.1 |
| December | 12 | 0 | 0.0 |
|  | Blank | 335 | 44.4 |
|  |  | TOTAL | 754 |
|  |  |  | 100.0 |

a. 1987 Number of colonies on October 1

| Non-Blank | 670 | 88.9 |
| ---: | ---: | ---: |
| Blank | 84 | 11.1 |
| TOTAL | 754 | 100.0 |

$\begin{array}{llll}7.38 & 8 & 1.08 & 4\end{array}$
11

| Blank | 84 | 11.1 |
| ---: | ---: | ---: |
| TOTAL | 754 | 100.0 |
|  |  |  |
|  |  |  |
| Non-Blank | 668 | 88.6 |
| Blank | 86 | 11.4 |
| TOTAL | 754 | 100.0 |

200
1,741
$1 \quad 28,503$
b. 1987 Number of working colonies at peak production

830
200
1,964
131,670
c. 1987 Month of the year your operation experienced peak production (beginning)

| January | 1 | 0 | 0.0 |
| :--- | :--- | ---: | ---: |
| February | 2 | 2 | 0.3 |
| March | 3 | 13 | 1.7 |
| April | 4 | 41 | 5.4 |
| May | 5 | 88 | 11.7 |
| June | 6 | 197 | 26.1 |


|  | Question Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | July | 7 | 185 | 24.5 |  |  |  |  |  |
|  | August | 8 | 29 | 3.8 |  |  |  |  |  |
|  | September | 9 | 7 | 0.9 |  |  |  |  |  |
|  | October | 10 | 2 | 0.3 |  |  |  |  |  |
|  | November | 11 | 0 | 0.0 |  |  |  |  |  |
|  | December | 12 | 0 | 0.0 |  |  |  |  |  |
|  |  | Blank | 190 | 25.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 6.10 | 6 | 1.19 | 2 | 10 |
| $\bigcirc$ | d. 1987 Month of the year your operation experienced pcak production (end) |  |  |  |  |  |  |  |  |
|  | January | 1 | 0 | 0.0 |  |  |  |  |  |
|  | February | 2 | 0 | 0.0 |  |  |  |  |  |
|  | March | 3 | 0 | 0.0 |  |  |  |  |  |
|  | April | 4 | 6 | 0.8 |  |  |  |  |  |
|  | May | 5 | 18 | 2.4 |  |  |  |  |  |
|  | June | 6 | 54 | 7.2 |  |  |  |  |  |
|  | July | 7 | 133 | 17.6 |  |  |  |  | - |
|  | August | 8 | 188 | 24.9 |  |  |  |  |  |
|  | September | 9 | 31 | 4.1 |  |  |  |  |  |
|  | October | 10 | 5 | 0.7 |  |  |  |  |  |
|  | November | 11 | 1 | 0.1 |  |  |  |  |  |
|  | December | 12 | 0 | 0.0 |  |  |  |  |  |
|  |  | Blank | 318 | 42.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 7.37 | 8 | 1.065 | 4 | 11 |
|  | a. 1988 Number of colonies on October 1 | Non-Blank | 678 | 89.9 |  |  |  |  |  |
|  |  | Blank | 76 | 10.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 783 | 239 | 1,760 | 2 | 29,640 |
|  | b. 1988 Number of working colonies at peak production | Non-Blank | 676 | 89.7 |  |  |  |  |  |
|  |  | Blank | 78 | 10.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 836 | 228 | 1,987 | 2 | 32,934 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum

c. 1988 Month of the year your operation experienced peak production (beginning)

| January | 1 | 0 | 0.0 |
| :--- | ---: | ---: | ---: |
| February | 2 | 3 | 0.4 |
| March | 3 | 11 | 1.5 |
| April | 4 | 42 | 5.6 |
| May | 5 | 91 | 12.1 |
| June | 6 | 176 | 23.3 |
| July | 7 | 189 | 25.1 |
| August | 8 | 32 | 4.2 |
| Scptember | 9 | 9 | 1.2 |
| October | 10 | 4 | 0.5 |
| November | 11 | 0 | 0.0 |
| December | 12 | 0 | 0.0 |
|  | Blank | 197 | 26.1 |
|  | TOTAL | 754 | 100.0 |

d. 1988 Month of the year your operation experienced peak production (end)

| January | 1 | 0 | 0.0 |
| :--- | ---: | ---: | ---: |
| February | 2 | 0 | 0.0 |
| March | 3 | 0 | 0.0 |
| April | 4 | 4 | 0.5 |
| May | 5 | 18 | 2.4 |
| June | 6 | 59 | 7.8 |
| July | 7 | 113 | 15.0 |
| August | 8 | 191 | 25.3 |
| September | 9 | 42 | 5.6 |
| October | 10 | 6 | 0.8 |
| November | 11 | 1 | 0.1 |
| December | 12 | 0 | 0.0 |
|  | Blank | 320 | 42.4 |
|  | TOTAL | 754 | 100.0 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{cccccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation Minimum Maximum
\end{tabular}

|  | 11. PRODUCTS AND SERVICES |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1) What were your total gross receipts fr 1985 Honey (not forfeited to CCC) | s sold, servi | ided | program | rticipatio | 1985 | 988? | 20 | 1,365,240 |
|  |  | Non-Blank 326 | 326 | 43.2 |  | 4,950 | 90,049 |  |  |
|  |  | Blank | 428 | 56.8 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 28,905 |  |  |  |  |
|  | Pollination Services | Non-Blank | 133 | 17.6 |  |  |  |  |  |
|  |  | Blank | 621 | 82.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 21,829 | 4,400 | 39,272 | 1 | 230,587 |
|  | 1985 Beeswax | Non-Blank | 183 | 24.3 |  |  |  |  |  |
|  |  | Blank | 571 | 75.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 2,528 | 700 | 5,346 | 1 | 40,000 |
| N | '1985 Package Bees | Non-Blank | 16 | 2.1 |  |  |  |  |  |
|  |  | Blank | 738 | 97.9 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 28,435 | 5,781 | 60,720 | 100 | 239,858 |
|  | 1985 Queens and Nucs | Non-Blank | 30 | 4.0 |  |  |  |  |  |
|  |  | Blank | 724 | 96.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 14,007 | 2,813 | 25,226 | 24 | 126,847 |
|  | 1985 Royal Jelly, Propolis, Pollen | Non-Blank | 17 | 2.3 |  |  |  |  |  |
|  |  | Blank | 737 | 97.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 5,199 | 2,112 | 7,423 | 40 | 25,000 |
|  | 1985 Other | Non-Blank | 17 | 2.3 |  |  |  |  |  |
|  |  | Blank | 737 | 97.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 63,420 | 3,000 | 184,721 | 150 | 738,303 |
|  | 1985 Gov't Payments (net receipts)- CCC forfeitures |  |  |  |  |  |  |  |  |
|  |  | Non-Blank | 181 | 24.0 |  |  |  |  |  |
|  |  | Blank | 573 | 76.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 42,432 | 7,137 | 130,594 | 220 | 1,327,152 |



| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | m Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1986 Gov't Payments (net receipts)- Marketing loan benefit |  |  |  |  |  |  |  |  |  |
|  |  | Non-Blank | 81 | 10.7 | 13,676 | 2,379 | 43,480 | 1 | 325,052 |
|  |  | Blank | 673 | 89.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| 1987 Honey (not forfeited to CCC) |  | Non-Blank | 411 | 54.5 | 45,370 | 8,000 | 101,133 | 15 1, | 1,063,017 |
|  |  | Blank | 343 | 45.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| 1987 | Pollination Services | Non-Blank | 150 | 19.9 | 22,939 | 6,303 | 39,584 | 45 | 288,675 |
|  |  | Blank | 604 | 80.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| 1987 | Beeswax | Non-Blank | 209 | 27.7 | 3,031 | 640 | 10,018 | 1 | 131,867 |
|  |  | Blank | 543 | 72.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| 1987 | Package Bees | Non-Blank | 17 | 2.3 | 23,234 | 4,000 | 65,649 | 180 | 274,712 |
|  |  | Blank | 737 | 97.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| 1987 | Queens and Nucs | Non-Blank | 37 | 4.9 | 13,856 | 3,895 | 21,938 | 12 | 106,279 |
|  |  | Blank | 717 | 95.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| 1987 | Royal Jelly, Propolis, Pollen | Non-Blank | 29 | 3.8 | 6,147 | 1,308 | 9,690 | 70 | 39,000 |
|  |  | Blank | 725 | 96.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| 1987 Other |  | Non-Blank | 20 | 2.7 |  | 2,763 | 205,019 | 68 | 664,856 |
|  |  | Blank | 734 | 97.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 88,770 |  |  |  |  |



| Question | Response Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1988 Other | Non-Blank | 24 | 3.2 |  |  |  |  |  |
|  | Blank | 730 | 96.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 50,677 | 2,725 | 131,330 | 30 | 545,000 |
| 1988 Gov't Payments (net receipts)- CCC forfeitures |  |  |  |  |  |  |  |  |
|  | Non-Blank | 181 | 24.0 |  |  |  |  |  |
|  | Blank | 573 | 76.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 33,700 | 5,297 | 104,759 | 26 | 959,558 |
| 1988 Gov't Payments (net receipts)- Marketing loan benefit |  |  |  |  |  |  |  |  |
|  | Non-Blank | 189 | 25.1 |  |  |  |  |  |
|  | Blank | 565 | 74.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 12,231 | 2,718 | 30,264 | 40 | 301,215 |

ー 2) How much of the following did your beekecping operation produce or provide from 1985 to 1988 ?

| How much of the following did your ber | operation p | or pro | 1985 | 1988? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1985 Honey | Non-Blank | 486 | 64.5 |  |  |  |  |  |
|  | Blank | 268 | 35.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 53,528 | 10,105 | 139,390 | 5 | 1,774,500 |
| 1985 Beeswax | Non-Blank | 294 | 39.0 |  |  |  |  |  |
|  | Blank | 460 | 61.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 1,596 | 350 | 3,628 | 1 | 35,000 |
| 1985 Royal Jelly, Propolis \& Pollen | Non-Blank | 19 | 2.5 |  |  |  |  |  |
|  | Blank | 735 | 97.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 1,482 | 200 | 2,782 | 5 | 9,000 |
| 1985 Package Bees | Non-Blank | 12 | 1.6 |  |  |  |  |  |
|  | Blank | 742 | 98.4 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 5,821 | 1,500 | 12,524 | 3 | 44,172 |
| 1985 Nucs | Non-Blank | 28 | 3.7 |  |  |  |  |  |
|  | Blank | 726 | 96.3 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 880 | 95 | 1,956 | 2 | 6,500 |




| Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | m Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pollination Services - \# of Rentals | Non-Blank | 111 | 14.7 |  |  |  |  |  |
|  | Blank | 643 | 85.3 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 533 | 122 | 967 | 1 | 4,314 |
| 1988 Honey | Non-Blank | 559 | 74.1 |  |  |  |  |  |
|  | Blank | 195 | 25.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 71,024 | 15,000 | 167,304 | 9 2, | 2,614,591 |
| 1988 Beeswax | Non-Blank | 349 | 46.3 |  |  |  |  |  |
|  | Blank | 405 | 53.7 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 2,181 | 400 | 6,080 | 1 | 80,000 |
| Royal Jelly, Propolis \& Pollen | Non-Blank | 37 | 4.9 |  |  |  |  |  |
|  | Blank | 717 | 95.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 2,154 | 160 | 4,222 | 1 | 16,000 |
| 1988 Package Bees | Non-Blank | 8 | 1.1 |  |  |  |  |  |
|  | Blank | 746 | 98.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 4,589 | 1,225 | 8,276 | 3 | 24,258 |
| 1988 Nucs | Non-Blank | 30 | 4.0 |  |  |  |  |  |
|  | Blank | 724 | 96.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 1,146 | 81 | 2,682 | 2 | 10,000 |
| 1988 Queens Sold Separately | Non-Blank | 20 | 2.7 |  |  |  |  |  |
|  | Blank | 734 | 97.3 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 2,683 | 800 | 4,858 | 6 | 20,792 |
| Pollination Services - \# of Colonies | Non-Blank | 168 | 22.3 |  |  |  |  |  |
|  | Blank | 586 | 77.7 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 774 | 277 | 1,282 | 2 | 8,500 |
| 1988 Pollination Services - \# of Rentals | Non-Blank | 114 | 15.1 |  |  |  |  |  |
|  | Blank | 640 | 84.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 596 | 129 | 1042 | 1 | 4,500 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccccccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum

3) Of the products and services provided by your beekeeping operation referred to in Question 2, which three do you consider most important to your operation? (Please write down the items in the spaces provided in the order of their importance to your operation.)

| Most Important | Honey | 557 | 73.9 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beeswax 2 | 1 | 0.1 |  |  |  |  |  |
|  | Royal Jelly, Propolis |  |  |  |  |  |  |  |
|  | \& Pollen 3 | 4 | 0.5 |  |  |  |  |  |
|  | Package Bees 4 | 1 | 0.1 |  |  |  |  |  |
|  | Nucs 5 | 0 | 0.0 |  |  |  |  |  |
|  | Queens Sold Separately 6 | 2 | 0.3 |  |  |  |  |  |
|  | Pollination Services 7 | 75 | 9.9 |  |  |  |  |  |
|  | Blank | 114 | 15.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 1.74 | 1 | 1.95 | 1 | 7 |
| Second Most Important | Honey 1 | 70 | 9.3 |  |  |  |  |  |
|  | Beeswax 2 | 276 | 36.6 |  |  |  |  |  |
|  | Royal Jelly, Propolis <br> \& Pollen | 7 | 0.9 |  |  |  |  |  |
|  | Package Bees 4 | 7 | 0.9 |  |  |  |  |  |
|  | Nucs 5 | 11 | 1.5 |  |  |  |  |  |
|  | Queens Sold Separately 6 | 8 | 1.1 |  |  |  |  |  |
|  | Pollination Services 7 | 120 | 15.9 |  |  |  |  |  |
|  | Blank | 255 | 33.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 3.23 | 2 | 2.27 | 1 | 7 |
| Third Most Important | Honey | 10 | 1.3 |  |  |  |  |  |
|  | Beeswax 2 | 132 | 17.5 |  |  |  |  |  |
|  | Royal Jelly, Propolis <br> \& Pollen | 16 | 2.1 |  |  |  |  |  |
|  | Package Bees 4 | 5 | 0.7 |  |  |  |  |  |
|  | Nucs 5 | 17 | 2.3 |  |  |  |  |  |
|  | Queens Sold Separately 6 | 11 | 1.5 |  |  |  |  |  |
|  | Pollination Services 7 | 55 | 7.3 |  |  |  |  |  |
|  | Blank | 508 | 67.4 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 3.57 | 2 | 2.16 | 1 | 7 |


| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4) Did your beekeeping operation suffer a reduction in production for any of the following reasons from 1985 to 1988 (CHECK where appropriate.) |  |  |  |  |  |  |  |  |  |
| 1985 Drought | Not Checked | 0 | 621 | 82.4 |  |  |  |  |  |
|  | Chocked | 1 | 133 | 17.6 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.18 | 0 | 0.38 | 0 | 1 |
| 1985 Disease | Not Checked | 0 | 731 | 96.9 |  |  |  |  |  |
|  | Checked | 1 | 23 | 3.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.17 | 0 | 1 |
| 1985 Mites | Not Checked | 0 | 732 | 97.1 |  |  |  |  |  |
|  | Chocked | 1 | 22 | 2.9 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.17 | 0 | 1 |
| 1985 Other (First Response) | Not Checked | 0 | 618 | 82.0 |  |  |  |  |  |
|  | Checked | 1 | 136 | 18.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.18 | 0 | 0.38 | 0 | 1 |
| 1985 Other (Second Response) | Not Checked | 0 | 738 | 97.9 |  |  |  |  |  |
|  | Checked | 1 | 16 | 2.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.02 | 0 | 0.14 | 0 | 1 |
| 1986 Drought | Not Checked | 0 | 621 | 82.4 |  |  |  |  |  |
|  | Checked | 1 | 133 | 17.6 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.18 | 0 | 0.38 | 0 | 1 |
| 1986 Disease | Not Checked | 0 | 731 | 96.9 |  |  |  |  |  |
|  | Checked | 1 | 23 | 3.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.17 | 0 | 1 |
| 1986 Mites | Not Checked | 0 | 727 | 96.4 |  |  |  |  |  |
|  | Checked | 1 | 27 | 3.6 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.19 | 0 | 1 |
| 1986 Other (First Response) | Not Checked | 0 | 605 | 80.2 |  |  |  |  |  |
|  | Chocked | 1 | 149 | 19.8 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.20 | 0 | 0.40 | 0 | 1 |



| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1988 Other (First Response) | Not Checked | 0 | 633 | 84.0 |  |  |  |  |  |
|  | Checked | 1 | 121 | 16.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.16 | 0 | 0.37 | 0 | 1 |
| 1988 Other (Second Responsc) | Not Checked | 0 | 734 | 97.3 |  |  |  |  |  |
|  | Checked | 1 | 20 | 2.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.16 | 0 | 1 |

Honey Marketing:
5) During the period of 1985 to 1988 what percent of the honey you marketed was white, extra light amber, light amber or amber?
1985 White

1985 Extra Light Amber

| 1985 White | Non-Blank | 572 | 75.9 |  |  |  | 0 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Blank | 182 | 24.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 36.26 | 0.00 | 44.15 |  |  |
| 1985 Extra Light Amber | Non-Blank | 572 | 75.9 |  |  |  | 0 |  |
|  | Blank | 182 | 24.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 24.64 | 0.00 | 35.50 |  | 100 |
| 1985 Light Amber | Non-Blank | 572 | 75.9 |  |  |  | 0 |  |
|  | Blank | 182 | 24.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 24.29 | 0.00 | 36.63 |  | 100 |
| 1985 Amber | Non-Blank | 572 | 75.9 |  |  |  | 0 |  |
|  | Blank | 182 | 24.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 13.62 | 0.00 | 29.56 |  | 100 |
| 1985 Non-Table | Non-Blank | 572 | 75.9 |  |  |  | 0 |  |
|  | Blank | 182 | 24.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 1.07 | 0.00 | 7.31 |  | 90 |
| 1986 White | Non-Blank | 597 | 79.2 |  |  |  | 0 |  |
|  | Blank | 157 | 20.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 34.47 | 0.00 | 43.42 |  | 100 |

$\square$

| 100.0 | 36.26 | 0.00 | 44.15 | 0 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- |

N


6) During the period of 1985 to 1988 which of the following markets did you use to dispose of your honey crop and what was the amount of honey sold in each market? (Each honey crop year's total should agrce with the honey production you reported in Question 2.)

| 1985 Roadside Market | Non-Blank | 128 | 17.0 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Blank | 626 | 83.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 3,004 | 759 | 15,573 | 30 | 175,000 |
| 1985 Retail Stores | Non-Blank | 106 | 14.1 |  |  |  |  |  |
|  | Blank | 648 | 85.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 8,271 | 2,375 | 16,498 | 50 | 122,850 |
| 1985 Institutions | Non-Blank | 5 | 0.7 |  |  |  |  |  |
|  | Blank | 749 | 99.3 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 4,414 | 2,000 | 6,523 | 30 | 15,839 |






| Question Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | m Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1988 Broker or Dealer | Non-Blank | 65 | 8.6 |  |  |  |  |  |
|  | Blank | 689 | 91.4 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 35,879 | 3,360 | 86,926 | 61 | 549,000 |
| 1988 Packers/Bottlers Independent | Non-Blank | 207 | 27.5 |  |  |  |  |  |
|  | Blank | 547 | 72.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 85,645 | 22,680 | 210,533 | 100 | 2,522,591 |
| 1988 Packers/Bottlers Cooperative | Non-Blank | 69 | 9.2 |  |  |  |  |  |
|  | Blank | 685 | 90.8 |  |  |  |  |  |
|  |  | 754 | 100.0 | 109,723 | 65,000 | 151,026 | 50 | 850,000 |
| 1988 Direct Export | Non-Blank | 3 | 0.4 |  |  |  |  |  |
|  | Blank | 751 | 99.6 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 40,383 | 36,000 | 42,097 | 650 | 84,500 |
| 1988 Industrial User or Food Manufacturer | Non-Blank | 32 | 4.2 |  |  |  |  |  |
|  | Blank | 722 | 95.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 45,158 | 6,560 | 93,953 | 50 | 409,400 |
| 1988 Forfeited to CCC | Non-Blank | 123 | 16.3 |  |  |  |  |  |
|  | Blank | 631 | 83.7 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 41,299 | 11,006 | 90,692 | 250 | 677,162 |
| 1988 Other Outlet | Non-Blank | 52 | 6.9 |  |  |  |  |  |
|  | Blank | 702 | 93.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 9,382 | 638 | 34,954 | 20 | 233,363 |
| 1988 Not Sold or In Storage | Non-Blank | 40 | 5.3 |  |  |  |  |  |
|  | Blank | 714 | 94.7 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 17,712 | 1,450 | 41,222 | 10 | 200,000 |
| 1988 Total | Non-Blank | 543 | 72.0 |  |  |  |  |  |
|  | Blank | 211 | 28.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 70,992 | 15,479 | 167,241 | 452 | 2,614,591 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 


| Standard |
| :---: |
| Deviation |

\end{tabular} Minimum Maximum

Government Honey Price Support Program:
7) Since the 1981 crop year, have you participated in the government honey price support program?

| Since the |  |  |  |
| :--- | ---: | ---: | ---: |
| a. | No | 1 | 111 |
| b. Yes | 2 | 600 | 14.7 |
|  | Blank | 43 | 5.6 |
|  | TOTAL | 754 | 100.7 |

4.7

| 1.84 | 2 | 0.36 | 1 |
| :--- | :--- | :--- | :--- |

2
8) Please fill in the information for honey your operation placed under loan with the government honey price support program from 1981 to 1988.

| 1981 Quantity Placed Under Loan | Non-Blank | 37 | 4.9 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Blank | 717 | 95.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 134,089 | 40,000 | 257,087 | 100 | 1,131,674 |
| 1981 Quantity Forfeited to CCC | Non-Blank | 21 | 2.8 |  |  |  |  |  |
|  | Blank | 733 | 97.2 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 108,972 | 38,400 | 214,114 | 3,781 | 967,994 |
| 1981 Loan Forfeitures | Non-Blank | 16 | 2.1 |  |  |  |  |  |
|  | Blank | 738 | 97.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 56,755 | 10,950 | 135,559 | 658 | 555,156 |
| 1982 Quantity Placed Under Loan | Non-Blank | 42 | 5.6 |  |  |  |  |  |
|  | Blank | 712 | 94.4 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 195,465 | 48,182 | 421,764 | 100 | 2,252,094 |
| 1982 Quantity Forfeited to CCC | Non-Blank | 30 | 4.0 |  |  |  |  |  |
|  | Blank | 724 | 96.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 151,662 | 42,559 | 407,433 | 552 | 2,211,834 |
| 1982 Loan Forfeitures | Non-Blank | 21 | 2.8 |  |  |  |  |  |
|  | Blank | 733 | 97.2 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 95,560 | 14,936 | 291,429 | 311 | 1,354,250 |
| 1983 Quantity Placed Under Loan | Non-Blank | 67 | 8.9 |  |  |  |  |  |
|  | Blank | 687 | 91.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 140,505 | 33,000 | 358,092 | 100 | 2,477,546 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation Minimum Maximum
\end{tabular}





| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f. Other | Not Circled | 0 | 633 | 84.0 |  |  |  |  |  |
|  | Circled | 1 | 121 | 16.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.16 | 0 | 0.37 | 0 | 1 |

10) In your opinion, how would your operation be affected if the federal honey support program were eliminated? (Please circle ALL that apply.) a. COULD NOT CONTINUE being a beekeeper.

| Not Circled | 0 | 509 | 67.5 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 245 | 32.5 |
|  | TOTAL | 754 | 100.0 |


| 0.33 | 0 | 0.47 | 0 |
| :--- | :--- | :--- | :--- |

b. Would MAINTAIN the size of my operation.

| Not Circled | 0 | 504 | 66.8 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 250 | 33.2 |
|  | TOTAL | 754 | 100.0 |

c. Would DECREASE the size of my operation.

| Not Circled | 0 | 616 | 81.7 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 138 | 18.3 |
|  | TOTAL | 754 | 100.0 |

d. Would EXPAND the size of my operation.

| Not Circled | 0 | 718 | 95.2 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 36 | 4.8 |
|  | TOTAL | 754 | 100.0 |


| Not Circled | 0 | 670 | 88.9 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 84 | 11.1 |
|  | TOTAL | 754 | 100.0 |

0.11

0
0.31

0
1
f. Other changes (Please specify.)

| Not Circled | 0 | 644 | 85.4 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 110 | 14.6 |
|  | TOTAL | 754 | 100.0 |


|  | Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bee Colony Transport: |  |  |  |  |  |  |  |  |  |
|  | 11) a. Did you transport any of your bee colonies to other states in 1985, 1986, 1987 or 1988? (Circle ONE letter for each year.) |  |  |  |  |  |  |  |  |  |
|  | $1985$ | Not Circled | 0 | 633 | 84.0 |  |  |  |  |  |
|  |  | Circled | 1 | 121 | 16.1 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 0.16 | 0 | 0.37 | 0 | 1 |
|  | 1986 | Not Circled | 0 | 627 | 83.2 |  |  |  |  |  |
|  |  | Circled | 1 | 127 | 16.8 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 0.17 | 0 | 0.37 | 0 | 1 |
|  | 1987 | Not Circled | 0 | 614 | 81.4 |  |  |  |  |  |
|  |  | Circled | 1 | 140 | 18.6 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 0.19 | 0 | 0.39 | 0 | 1 |
|  | 1988 | Not Circled | 0 | 618 | 82.0 |  |  |  |  |  |
| ${ }_{\sim}^{\sim}$ |  | Circled | 1 | 136 | 18.0 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 0.18 | 0 | 0.38 | 0 | 1 |
| No, I did not transport bee colonies to other states in 1985, 1986, 1987 or 1988. |  |  |  |  |  |  |  |  |  |  |
|  |  | Not Circled | 0 | 187 | 24.8 |  |  |  |  |  |
|  |  | Circled | 1 | 567 | 75.2 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 0.75 | 1 | 0.43 | 0 | 1 |

11) b. If you transported any of your bee colonies to other states, what was the main purpose? (Please check where appropriate.) 1985 a. Provide paid pollination services

| Not Circled | 0 | 712 | 94.4 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 42 | 5.6 |
|  | TOTAL | 754 | 100.0 |

0.06
0.23

0
1
1985 b. Seek floral source for honey production

| Not Circled | 0 | 710 | 94.2 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 44 | 5.8 |
|  | TOTAL | 754 | 100.0 |




11) c. What is your best estimate of the total mileage for transporting your bee colonies in each year for any reason? Total mileage includes all transporting activitics to and from home location within state as well as between states for all vehicles.
$\begin{array}{lllll}\text { a. } 1985 & \text { Non-Blank } & 470 & 62.3\end{array}$
b. 1986
c. 1987
d. 1988

| Non-Blank | 470 | 62.3 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Blank | 284 | 37.7 |  |  |  |  |  |
| TOTAL | 754 | 100.0 | 14,176 | 1,925 | 37,776 | 0 | 500,000 |
| Non-Blank | 485 | 64.3 |  |  |  |  |  |
| Blank | 269 | 35.7 |  |  |  |  |  |
| TOTAL | 754 | 100.0 | 14,323 | 2,000 | 39,298 | 0 | 600,000 |
| Non-Blank | 497 | 65.9 |  |  |  |  |  |
| Blank | 257 | 34.1 |  |  |  |  |  |
| TOTAL | 754 | 100.0 | 14,679 | 2,000 | 42,428 | 0 | 700,000 |
| Non-Blank | 503 | 66.7 |  |  |  |  |  |
| Blank | 251 | 33.3 |  |  |  |  |  |
| TOTAL | 754 | 100.0 | 14,760 | 1,800 | 44,051 | 0 | 750,000 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum

Pollination Services:
12) Did your operation transport bee colonies to one or more locations during 1985, 1986, 1987 or 1988 to provide paid pollination services?

| No | 1 | 475 | 63.0 |
| :--- | ---: | ---: | ---: |
| Yes | 2 | 208 | 27.6 |
|  | Blank | 71 | 9.4 |
|  | TOTAL | 754 | 100.0 |

13) Please answer the following questions based on your most recent experience.
a. For which year are you providing information on pollination services?

|  | 1982 | 82 | 1 | 0.1 |
| ---: | ---: | ---: | ---: | ---: |
|  | 1983 | 83 | 0 | 0.0 |
|  | 1984 | 84 | 0 | 0.0 |
|  | 1985 | 85 | 5 | 0.7 |
|  | 1986 | 86 | 9 | 1.2 |
|  | 1987 | 87 | 11 | 1.5 |
|  | 1988 | 88 | 127 | 16.8 |
|  | 1989 | 89 | 43 | 9.7 |
|  | 1990 | 90 | 2 | 0.3 |
|  |  | Blank | 556 | 73.7 |
|  |  | TOTAL | 754 | 100.0 |

b. How many of your colonies were used at the start of the pollination season?

| Non-Blank | 198 | 26.3 |
| ---: | ---: | ---: |
| Blank | 556 | 73.7 |
| TOTAL | 754 | 100.0 |

$700 \quad 250 \quad 1,192$

4
8,000
c. How many of your colonies were being used at the end of the pollination season?

| Non-Blank | 196 | 26.0 |
| ---: | ---: | ---: |
| Blank | 558 | 74.0 |
| TOTAL | 754 | 100.0 |

$635 \quad 250$

1,043
0
6,000
d. How many times were your colonies relocated during the year to provide paid or unpaid pollination services?

| Non-Blank | 198 | 26.3 |
| ---: | ---: | ---: |
| Blank | 556 | 73.7 |
| TOTAL | 754 | 100.0 |

$2.83 \quad 2$
5.54

75

Question $\quad$ Response $\quad$ Value \begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Mcdian 

Standard <br>
Deviation Minimum
\end{tabular} Maximum

e. How many total miles were your colonies transported during a year to provide pollination services? (Please approximate if unsure. Total miles includes all transporting activities to and from home location within state as well as between states.)

| Non-Blank | 194 | 25.7 |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Blank | 560 | 74.3 |  |  |  |  |  |
| TOTAL | 754 | 100.0 | 9,493 | 1,850 | 18,117 | 0 | 150,000 |

f. In the table below, please indicate the state(s) where your colonies provide paid pollination services, the main crops pollinated, colonies used and applicable pollination fees received. Begin with the first crops pollinated in the year and proceed throughout the year. If more than one crop is pollinated in a state, report additional crops in the second column.

## First Section

State Where Service is Provided

| AL | 1 | 0.1 |
| ---: | ---: | ---: |
| AZ | 1 | 0.1 |
| CA | 93 | 12.3 |
| CO | 2 | 0.3 |
| FL | 5 | 0.7 |
| GA | 3 | 0.4 |
| IA | 3 | 0.4 |
| IL | 7 | 0.9 |
| IN | 2 | 0.3 |
| MA | 1 | 0.1 |
| ME | 3 | 0.4 |
| MI | 18 | 2.4 |
| MN | 4 | 0.5 |
| MO | 2 | 0.3 |
| MT | 2 | 0.3 |
| NC | 2 | 0.3 |
| NE | 3 | 0.4 |
| NJ | 1 | 0.1 |
| NM | 1 | 0.1 |
| NY | 4 | 0.5 |
| OH | 6 | 0.8 |
| OR | 8 | 1.1 |
| PA | 6 | 0.8 |
| TX | 6 | 0.8 |
| UT | 1 | 0.1 |




| Question | Response Value | Number of Responses | Percent of Total | Mean | Mcdian | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Crops Pollinated | NY | 1 | 0.1 |  |  |  |  |  |
|  | OR | 13 | 1.7 |  |  |  |  |  |
|  | PA | 4 | 0.5 |  |  |  |  |  |
|  | UT | 2 | 0.3 |  |  |  |  |  |
|  | VT | 1 | 0.1 |  |  |  |  |  |
|  | WA | 13 | 1.7 |  |  |  |  |  |
|  | Blank | 655 | 86.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Alfalfa | 9 | 1.2 |  |  |  |  |  |
|  | Almonds | 1 | 0.1 |  |  |  |  |  |
|  | Apples | 19 | 2.5 |  |  |  |  |  |
|  | Avocados | 1 | 0.1 |  |  |  |  |  |
|  | Blucberries | 12 | 1.6 |  |  |  |  |  |
|  | Carrots | 1 | 0.1 |  |  |  |  |  |
|  | Cherries | 10 | 1.3 |  |  |  |  |  |
|  | Cotton | 1 | 0.1 |  |  |  |  |  |
|  | Cranberries | 1 | 0.1 |  |  |  |  |  |
|  | Cucumbers | 4 | 0.5 |  |  |  |  |  |
|  | Fruit | 1 | 0.1 |  |  |  |  |  |
|  | Grapefruit | 1 | 0.1 |  |  |  |  |  |
|  | Melons | 8 | 0.1 |  |  |  |  |  |
|  | Onions | 3 | 0.4 |  |  |  |  |  |
|  | Peaches | 1 | 0.1 |  |  |  |  |  |
|  | Pears | 3 | 0.4 |  |  |  |  |  |
|  | Pickles | 2 | 0.3 |  |  |  |  |  |
|  | Plums | 3 | 0.4 |  |  |  |  |  |
|  | Prunes | 4 | 0.5 |  |  |  |  |  |
|  | Radish | 1 | 0.1 |  |  |  |  |  |
|  | Raspberrics | 2 | 0.3 |  |  |  |  |  |
|  | Sage | 1 | 0.1 |  |  |  |  |  |
|  | Soybeans | 1 | 0.1 |  |  |  |  |  |
|  | Squash | 1 | 0.1 |  |  |  |  |  |
|  | Sunflowers | 1 | 0.1 |  |  |  |  |  |
|  | Vegetables | 1 | 0.1 |  |  |  |  |  |
|  | Vetch | 1 | 0.1 |  |  |  |  |  |



| Question | Response Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OR | 11 | 1.5 |  |  |  |  |  |
|  | PA | 2 | 0.3 |  |  |  |  |  |
|  | UT | 3 | 0.4 |  |  |  |  |  |
|  | WA | 7 | 0.9 |  |  |  |  |  |
|  | Blank | 694 | 92.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Major Crops Pollinated | Alfalfa | 4 | 0.5 |  |  |  |  |  |
|  | Apples | 7 | 0.9 |  |  |  |  |  |
|  | Basil | 1 | 0.1 |  |  |  |  |  |
|  | Blueberries | 4 | 0.5 |  |  |  |  |  |
|  | Cantaloup | 4 | 0.5 |  |  |  |  |  |
|  | Carrots | 2 | 0.3 |  |  |  |  |  |
|  | Cherries | 8 | 1.1 |  |  |  |  |  |
|  | Citrus | 1 | 0.1 |  |  |  |  |  |
|  | Clover | 1 | 0.1 |  |  |  |  |  |
|  | Cranberries | 1 | 0.1 |  |  |  |  |  |
|  | Cucumbers | 2 | 0.3 |  |  |  |  | . |
|  | Evergreen | 1 | 0.1 |  |  |  |  |  |
|  | Fruit | 2 | 0.3 |  |  |  |  |  |
|  | Holly | 2 | 0.3 |  |  |  |  |  |
|  | Kiwi | 1 | 0.1 |  |  |  |  |  |
|  | Melons | 2 | 0.3 |  |  |  |  |  |
|  | Onions | 2 | 0.3 |  |  |  |  |  |
|  | Pears | 4 | 0.3 |  |  |  |  |  |
|  | Peppers | 2 | 0.3 |  |  |  |  |  |
|  | Pickles | 2 | 0.3 |  |  |  |  |  |
|  | Plums | 1 | 0.1 |  |  |  |  |  |
|  | Radish | 1 | 0.1 |  |  |  |  |  |
|  | Raspberries | 1 | 0.1 |  |  |  |  |  |
|  | Squash | 2 | 0.1 |  |  |  |  |  |
|  | Strawberries | 1 | 0.1 |  |  |  |  |  |
|  | Watermelon | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 694 | 92.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |






| Question Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cherries | 1 | 0.1 |  |  |  |  |  |
|  | Clover | 1 | 0.1 |  |  |  |  |  |
|  | Cranberries | 1 | 0.1 |  |  |  |  |  |
|  | Onions | 1 | 0.1 |  |  |  |  |  |
|  | Passion fruit | , | 0.1 |  |  |  |  |  |
|  | Blank | 746 | 98.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Total Colonies Used | Non-Blank | 8 | 1.1 |  |  |  |  |  |
|  | Blank | 746 | 98.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 160 | 113 | 173 | 10 | 500 |
| Colonies Used Per Acre | Non-Blank | 7 | 0.9 |  |  |  |  |  |
|  | Blank | 747 | 99.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 1.86 | 2.00 | 0.69 | 1 | 3 |
| Average Fee Rec'd per Colony | Non-Blank | 8 | 1.1 |  |  |  |  |  |
|  | Blank | 746 | 98.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 19.13 | 20 | 8.59 | 5 | 30 |
| Time When Service Begins | Non-Blank | 8 | 1.1 |  |  |  |  |  |
|  | Blank | 746 | 98.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Length of Time Crop is Pollinated | Non-Blank | 8 | 1.1 |  |  |  |  |  |
|  | Blank | 746 | 98.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 47 | 30 | 54 | 10 | 180 |
| Seventh Section |  |  |  |  |  |  |  |  |
| State Where Service is Provided | CA | 2 | 0.3 |  |  |  |  |  |
|  | OR | 1 | 0.1 |  |  |  |  |  |
|  | SC | 1 | 0.1 |  |  |  |  |  |
|  | WA | 2 | 0.3 |  |  |  |  |  |
|  | Blank | 748 | 99.2 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum

|  | Major Crops Pollinated | Almonds | 1 | 0.1 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Apples | 2 | 0.3 |  |  |  |  |  |
|  |  | Blueberries | 1 | 0.1 |  |  |  |  |  |
|  |  | Cantaloup | 1 | 0.1 |  |  |  |  |  |
|  |  | Pears | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 748 | 99.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Total Colonies Used | Non-Blank | 6 | 0.8 |  |  |  |  |  |
|  |  | Blank | 748 | 99.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 331 | 210 | 412 | 5 | 1,100 |
|  | Colonies Used Per Acre | Non-Blank | 5 | 0.7 |  |  |  |  |  |
|  |  | Blank | 749 | 99.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 1.70 | 1.00 | 1.20 | 0.5 | 3 |
| N | Average Fee Rec'd per Colony | Non-Blank | 6 | 0.8 |  |  |  |  |  |
|  |  | Blank | 748 | 99.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 18.33 | 18.50 | 5.24 | 12 | 27 |
|  | Time When Service Begins | Non-Blank | 6 | 0.8 |  |  |  |  |  |
|  |  | Blank | 748 | 99.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Length of Time Crop is Pollinated | Non-Blank | 6 | 0.8 |  |  |  |  |  |
|  |  | Blank | 748 | 99.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 20 | 17 | 9 | 10 | 30 |
|  | Eighth Section |  |  |  |  |  |  |  |  |
|  | State Where Service is Provided | CA | 1 | 0.1 |  |  |  |  |  |
|  |  | OR | 1 | 0.1 |  |  |  |  |  |
|  |  | SC | 1 | 0.1 |  |  |  |  |  |
|  |  | WA | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 750 | 99.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |


|  | Question Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Major Crops Pollinated | Apples | 1 | 0.1 |  |  |  |  |  |
|  |  | Raspberries | 1 | 0.1 |  |  |  |  |  |
|  |  | Strawberries | 1 | 0.1 |  |  |  |  |  |
|  |  | Vegetables | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 750 | 99.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Total Colonies Used | Non-Blank | 4 | 0.5 |  |  |  |  |  |
|  |  | Blank | 750 | 99.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 35 | 26 | 31 | 8 | 80 |
|  | Colonies Used Per Acre | Non-Blank | 4 | 0.5 |  |  |  |  |  |
|  |  | Blank | 750 | 99.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 1.75 | 1.50 | 0.96 | 1 | 3 |
| 出 | Average Fee Rec'd per Colony | Non-Blank | 4 | 0.5 |  |  |  |  |  |
| $\omega$ |  | Blank | 750 | 99.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 14.50 | 14.00 | 4.44 | 10 | 20 |
|  | Time When Service Begins | Non-Blank | 4 | 0.5 |  |  |  |  |  |
|  |  | Blank | 750 | 99.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Length of Time Crop is Pollinated | Non-Blank | 4 | 0.5 |  |  |  |  |  |
|  |  | Blank | 750 | 99.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 35 | 30 | 17 | 21 | 60 |
|  | Ninth Section |  |  |  |  |  |  |  |  |
|  | State Where Service is Provided | OR | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Major Crops Pollinated | Cabbage | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |



|  |  |  | Number of Rcsponses | Percent of Total |  |  | Standard |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Question | Response | Value | Responses | Total | Mean | Median | Deviation | Minimum | Maxim |



Question $\quad$ Response $\quad$ Value \begin{tabular}{cccccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation_Minimum Maximum
\end{tabular}




|  | Thirteenth Section |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State Where Service is Provided | OR | 1 | 0.1 |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |
|  | Major Crops Pollinated | Cucumbers | 1 | 0.1 |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |
|  | Total Colonies Used | Non-Blank | 1 | 0.1 |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 45 | 45 | 45 | 45 |
|  | Colonies Used Per Acre | Non-Blank | 1 | 0.1 |  |  |  |  |
| y |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.75 | 0.75 | 0.75 | 0.75 |
|  | Average Fee Rec'd per Colony | Non-Blank | 1 | 0.1 |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 25.00 | 25.00 | 25 | 25 |
|  | Time When Service Begins |  | 1 | 0.1 |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |
|  | Length of Time Crop is Pollinated | Non-Blank | 1 | 0.1 |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 30 | 30 | 30 | 30 |
|  | Fourtenth Section |  |  |  |  |  |  |  |
|  | State Where Service is Provided | OR | 1 | 0.1 |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |


| Question Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Crops Pollinated | Clover | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 753 | 99.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Total Colonies Used | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 753 | 99.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 70 | 70 |  | 70 | 70 |
| Colonies Used Per Acre | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 753 | 99.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 2.00 | 2.00 |  | 2.00 | 2.00 |
| Average Fee Rec'd per Colony | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 753 | 99.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 20.00 | 20.00 |  | 20 | 20 |
| Time When Service Begins | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 753 | 99.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Length of Time Crop is Pollinated | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 753 | 99.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 30 | 30 |  | 30 | 30 |

14) Please identify where your colonies that are used to provide paid pollination services are overwintered. First Section

| Location | AL | 1 | 0.1 |
| :--- | ---: | ---: | ---: |
|  | AZ | 7 | 0.9 |
|  | CA | 66 | 8.8 |
|  | CO | 2 | 0.3 |
|  | FL | 8 | 1.1 |
|  | GA | 3 | 0.4 |
|  | IA | 3 | 0.4 |
|  | ID | 4 | 0.5 |
|  | IL | 6 | 0.8 |
|  | IN | 1 | 0.1 |


|  | Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  |  | MA | 1 | 0.1 |  |  |  |  |  |
|  |  |  | ME | 1 | 0.1 |  |  |  |  |  |
|  |  |  | MI | 15 | 2.0 |  |  |  |  |  |
|  |  |  | MN | 2 | 0.3 |  |  |  |  |  |
|  |  |  | MO | 2 | 0.3 |  |  |  |  |  |
|  |  |  | MS | 1 | 0.1 |  |  |  |  |  |
|  |  |  | MT | 2 | 0.3 |  |  |  |  |  |
|  |  |  | NC | 2 | 0.3 |  |  |  |  |  |
|  |  |  | NE | 1 | 0.1 |  |  |  |  |  |
|  |  |  | NJ | 1 | 0.1 |  |  |  |  |  |
|  |  |  | NM | 1 | 0.1 |  |  |  |  |  |
|  |  |  | NY | 4 | 0.5 |  |  |  |  |  |
|  |  |  | OH | 5 | 0.7 |  |  |  |  |  |
|  |  |  | OR | 17 | 2.3 |  |  |  |  |  |
|  |  |  | PA | 4 | 0.5 |  |  |  |  |  |
|  |  |  | TX | 9 | 1.2 |  |  |  |  |  |
|  |  |  | UT | 2 | 0.3 |  |  |  |  |  |
|  |  |  | VA | 1 | 0.1 |  |  |  |  |  |
|  |  |  | VT | 2 | 0.3 |  |  |  |  |  |
|  |  |  | WA | 5 | 0.7 |  |  |  |  |  |
|  |  |  | WI | 5 | 0.7 |  |  |  |  |  |
|  |  |  | WV | 2 | 0.3 |  |  |  |  |  |
|  |  |  | Blank | 568 | 75.3 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Number of Colonies |  | Non-Blank | 177 | 23.5 |  |  |  |  |  |
|  |  |  | Blank | 577 | 76.5 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 870 | 300 | 1,450 | 4 | 8,000 |
| Second Section Location |  |  |  |  |  |  |  |  |  |  |
|  |  |  | CA | 4 | 0.5 |  |  |  |  |  |
|  |  |  | ID | 1 | 0.1 |  |  |  |  |  |
|  |  |  | MN | 1 | 0.1 |  |  |  |  |  |
|  |  |  | OR | 1 | 0.1 |  |  |  |  |  |
|  |  |  | SC | 1 | 0.1 |  |  |  |  |  |
|  |  |  | UT | 1 | 0.1 |  |  |  |  |  |


| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | vT | 1 | 0.1 |  |  |  |  |  |
|  |  | WA | 2 | 0.3 |  |  |  |  |  |
|  |  | Blank | 742 | 98.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Number of Colonies |  | Non-Blank | 201 | 26.7 |  |  |  |  |  |
|  |  | Blank | 553 | 73.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 638 | 345 | 703 | 37 | 2,400 |

III. 1988 PESTICIDE AND WINTER LOSSES

1) Did your beekeeping operation incur losses from pesticides during 1988 ?

| No | 1 | 432 | 57.3 |
| :--- | ---: | ---: | ---: |
| Yes | 2 | 247 | 32.8 |
|  | Blank | 75 | 9.9 |
|  | TOTAL | 754 | 100.0 |

2) What percent of your colonies were affected by pesticides in 1988?

| Non-Blank | 242 | 32.1 |
| ---: | ---: | ---: |
| Blank | 512 | 67.9 |
| TOTAL | 754 | 100.0 |67.9


| TOTAL | 754 | 100.0 | 36 | 25 | 30 | 0 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3) What percent of your affected colonies suffered $50 \%$ or more loss of honey bees from pesticides?

| Non-Blank | 228 | 30.2 |
| ---: | ---: | ---: |
| Blank | 526 | 69.8 |
| TOTAL | 754 | 100.0 |

0
4) Where did most of your losses occur?

| a. Colony | 1 | 25 | 3.3 |
| :--- | ---: | ---: | ---: |
| b. Field | 2 | 52 | 6.9 |
| c. Both | 3 | 165 | 21.9 |
|  | Blank | 512 | 67.9 |
|  | TOTAL | 754 | 100.0 |

5) Are you normally reimbursed for your honey bce losses from pesticides?

| a. No | 1 | 246 | 32.6 |
| :--- | :--- | ---: | ---: |
| b. Yes | 2 | 4 | 0.5 |

b. Yes 2

Question $\quad$ Response $\quad$ Value \begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total
\end{tabular}

Mean Median Standard

| Blank | 504 | 66.8 |
| :--- | :--- | :--- |


| TOTAL | 754 | 100.0 | 1.02 | 1 |
| :--- | :--- | :--- | :--- | :--- |

6) Does your beekeeping operation normally incur winter losses?

| a. No | 1 | 112 | 14.9 |
| :--- | ---: | ---: | ---: |
| b. Yes | 2 | 567 | 75.2 |
|  | Blank | 75 | 9.9 |
|  | TOTAL | 754 | 100.0 |

1.84
0.37

1
7) What percent of your colonies are affected by winter loss each year?

| Non-Blank | 556 | 73.7 |
| ---: | ---: | ---: |
| Blank | 198 | 26.3 |
| TOTAL | 754 | 100.0 |


| 100.0 | 20 | 10 | 23 | 0 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- |

8) What percent of your affected colonies suffered $50 \%$ or more winter loss of honey bees?

| Non-Blank | 470 | 62.3 |
| ---: | ---: | ---: |
| Blank | 284 | 37.7 |
| TOTAL | 754 | 100.0 |


| Not Circled | 0 | 633 | 84.0 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 121 | 16.0 |
|  | TOTAL | 754 | 100.0 |

# Not Circled 

## Circled

| 0 | 410 |
| ---: | ---: |
| 1 | 344 |
| TOTAL | 754 |

100.0 0.4675.5
c) Divisions with queens raised by the beekeeper using a natural queen cell

| Not Circled | 0 | 569 | 75.5 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 185 | 24.5 |
|  | TOTAL | 754 | 100.0 |

$0.25 \quad 0$
0.43

0
1

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccccccc}

| Number of |
| :---: |
| Responses | \& | Percent of |
| :---: |
| Total | \& Mean


 Median 

Standard <br>
Deviation Minimum
\end{tabular} Maximum


IV. LABOR USE

1) What is the average number of hours per week each of the following have spent on your entire operation in 1988 ? (Please fill in the blanks provided.)

|  | 1) What is the average number of hours per week each of the following have spent on your entire operation in 1988? (Please fill in the blanks provided.) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1) What is the average number of hours Jan-Mar Yourself | Non-Blank | 534 | 70.8 | 23 | 20 | 20 | 0 | 90 |
|  |  | Blank | 220 | 29.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| N | Jan-Mar Other Family Members | Non-Blank | 534 | 70.8 |  |  |  |  |  |
|  |  | Blank | 220 | 29.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 9 | 0 | 19 | 0 | 160 |
|  | Jan-Mar Hired Labor Full Time | Non-Blank | 534 | 70.8 |  |  |  |  |  |
|  |  | Blank | 220 | 29.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 21 | 0 | 215 | 0 | 4,584 |
|  | Jan-Mar Hired Labor Part Time | Non-Blank | 534 | 70.8 |  |  |  |  |  |
|  |  | Blank | 220 | 29.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 9 | 0 | 123 | 0 | 2,790 |
|  | Apr-Jun Yourself | Non-Blank | 623 | 82.6 |  |  |  |  |  |
|  |  | Blank | 131 | 17.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 33 | 30 | 24 | 0 | 125 |
|  | Apr-Jun Other Family Members | Non-Blank | 623 | 82.6 |  |  |  |  |  |
|  |  | Blank | 131 | 17.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 13 | 0 | 24 | 0 | 200 |
|  | Apr-Jun Hired Labor Full Time | Non-Blank | 623 | 82.6 |  |  |  |  |  |
|  |  | Blank | 131 | 17.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 25 | 0 | 252 | 0 | 5,737 |

$\begin{array}{ccc}0.22 & 0 & 0 \\ \text { entire operation in } & 1988 ? \\ 23 & 20 & 20\end{array}$
$\begin{array}{lll}\text { TOTAL } & 754 & 100.0\end{array}$
$0.41 \quad 0$
1


| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum Maximum |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| What is the average wage rate paid by your operation for each of the following? |  |  |  |  |  |  |  |  |  |
| Full time hired labor? |  | Non Blank | 184 | 24.4 |  |  |  |  |  |
|  |  | Blank | 570 | 75.6 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 454 | 500 | 304 | 0 | 1,250 |
| Part time hired labor? |  | Non-Blank | 317 | 42.0 |  |  |  |  |  |
|  |  | Blank | 437 | 58.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 423 | 450 | 327 | 0 | 5,000 |

V. Advertising and Promotional Activities

1) Where did you advertise your products and services in 1988? Exclude contributions for advertising and promotion done by marketing cooperatives and the National Honey Board. (Please put a CHECK on the appropriate spaces.)

| Honey Local Newspapers | Not Checked | 0 | 694 | 92.0 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Checked | 1 | 60 | 8.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.08 | 0 | 0.27 | 0 | 1 |
| Honey Circulars | Not Checked | 0 | 735 | 97.5 |  |  |  |  |  |
|  | Checked | 1 | 19 | 2.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.16 | 0 | 1 |
| Honey Beekeeping Journals | Not Checked | 0 | 746 | 98.9 |  |  |  |  |  |
|  | Checked | 1 | 8 | 1.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.10 | 0 | 1 |
| Honey Magazines | Not Checked | 0 | 744 | 98.7 |  |  |  |  |  |
|  | Checked | 1 | 10 | 1.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.11 | 0 | 1 |
| Honey Community Bulletin | ards |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 734 | 97.3 |  |  |  |  |  |
|  | Checked | 1 | 20 | 2.7 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.16 | 0 | 1 |
| Honey Direct Mail | Not Checked | 0 | 727 | 96.4 |  |  |  |  |  |
|  | Checked | 1 | 27 | 3.6 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.04 | 0 | 0.19 | 0 | 1 |



Question $\quad$ Response Value \begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median $\quad$

Standard <br>
Deviation Minimum
\end{tabular} Maximum

|  | Honey with Other Products Magazines |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not Checked 0 | 749 | 99.3 |  |  |  |  |  |
|  | Checked 1 | 9 | 0.7 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.11 | 0 | 1 |
|  | Honey with Other Products Community Bulletin Boards |  |  |  |  |  |  |  |
|  | Not Checked 0 | 749 | 99.3 |  |  |  |  |  |
|  | Checked 1 | 9 | 0.7 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.11 | 0 | 1 |
|  | Honey with Other Products Direct Mail |  |  |  |  |  |  |  |
|  | Not Checked 0 | 743 | 98.5 |  |  |  |  |  |
|  | Checked 1 | 11 | 1.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.12 | 0 | 1 |
| 2 | Honey with Other Products Road Signs |  |  |  |  |  |  |  |
|  | Not Checked 0 | 742 | 98.4 |  |  |  |  |  |
|  | Checked 1 | 12 | 1.6 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.02 | 0 | 0.13 | 0 | 1 |
|  | Honey with Other Products Word of Mouth |  |  |  |  |  |  |  |
|  | Not Checked 0 | 688 | 91.2 |  |  |  |  |  |
|  | Checked 1 | 66 | 8.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.09 | 0 | 0.28 | 0 | 1 |
|  | Honey with Other Products Other (First Response) |  |  |  |  |  |  |  |
|  | Not Checked 0 | 733 | 97.2 |  |  |  |  |  |
|  | Checked 1 | 21 | 2.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.03 | 0 | 0.16 | 0 | 1 |
|  | Honey with Other Products Other (Second Response) |  |  |  |  |  |  |  |
|  | Not Checked 0 | 747 | 99.1 |  |  |  |  |  |
|  | Checked 1 | 7 | 0.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.10 | 0 | 1 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum





Question $\quad$ Response $\quad$ Value \begin{tabular}{cccccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum

| Pollination Services Didn't Advertise |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not Checked | 0 | 205 | 27.2 |  |  |  |  |  |
| Checked | 1 | 549 | 72.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.73 | 1 | 0.45 | 0 | 1 |
| Package Bees and Queens Local Newspapers |  |  |  |  |  |  |  |  |
| Not Checked | 0 | 747 | 99.1 |  |  |  |  |  |
| Checked | 1 | 7 | 0.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.10 | 0 | 1 |
| $\begin{array}{llll}\text { Package Bees and Queens Circulars } \\ \text { Not Checked } & 0 & 750 & 99.5\end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Checked | 1 | 4 | 0.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.07 | 0 | 1 |
| Package Bees and Queens Beekeeping JournalsNot Checked |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Checked | 1 | 9 | 1.2 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.11 | 0 | 1 |
| Package Bees and Quecns Magazines |  |  |  |  |  |  |  |  |
| Not Checked | 0 | 752 | 99.7 |  |  |  |  |  |
| Checked | 1 | 2 | 0.3 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.05 | 0 | 1 |
| Package Bees and Queens Community Bulletin Boards 752 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Checked | 1 | 2 | 0.3 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.05 | 0 | 1 |
| Package Bees and Queens Direct Mail |  |  |  |  |  |  |  |  |
| Not Checked | 0 | 745 | 98.8 |  |  |  |  |  |
| Checked | 1 | 9 | 1.2 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.11 | 0 | 1 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{cccccccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Slandard <br>
Deviation
\end{tabular} Minimum Maximum



Question
Response $\qquad$ Number of Percent of Responses Total Mean $\qquad$ Median

Standard Deviation Minimum Maximum
c. Distributing honey information

| Not Circled | 0 | 615 | 81.6 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 139 | 18.4 |
|  | TOTAL | 754 | 100.0 |

0.18
0.39

0
1
d. Distributing free samples

| Not Circled | 0 | 546 | 72.4 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 208 | 27.6 |
|  | TOTAL | 754 | 100.0 |72.4

27.6

| 0 | 720 | 95.5 |
| ---: | ---: | ---: |
| 1 | 34 | 4.5 |
| TOTAL | 754 | 100.0 |

e. Publishing newspaper articles
Not Circled
Circled
f. Maintaining observation hive
Not Circled
Circled

| 0 | 666 | 88.3 |
| ---: | ---: | ---: |
| 1 | 88 | 11.7 |

TOTAL $\quad 754$
11.7
100.0
0.12
49.7

| 0 | 375 | 49.7 |
| ---: | ---: | ---: |
| 1 | 379 | 50.3 |
| TOTAL | 754 | 100.0 |

0.50
0.50
0.32

0
1
g. Contributing to the National Honey Board Not Circled Circled TOTAL 100.0
89.8

Not Circled
Circled

| 0 | 677 |
| ---: | ---: |
| 1 | 77 |
| TOTAL | 754 |

89.8
10.2
100.0
0.10
81.7

Not Circled
Circled

| 0 | 616 | 81.7 |
| ---: | ---: | ---: |
| 1 | 138 | 18.3 |
| TOTAL | 754 | 100.0 |

0.18
0.39

1


## SECTION B. PACKERS

I. FIRM CHARACTERISTICS

1) Are you a:
a. Full time Packer $1 \quad 24 \quad 3.2$
b. Part time Packer; Other time spent on beekeeping activities
c. Part time Packer; Other time spent on non-beckeeping activities

| 3 | 31 | 4.0 |
| ---: | ---: | ---: |
| Blank | 636 | 84.4 |
| TOTAL | 754 | 100.0 |

2.06
0.4

| AL | 3 | 0.4 |
| ---: | ---: | ---: |
| AR | 1 | 0.1 |
| AZ | 4 | 0.5 |
| CA | 7 | 0.9 |
| CO | 4 | 0.5 |
| FL | 2 | 0.3 |
| GA | 3 | 0.4 |
| IA | 8 | 1.1 |
| ID | 4 | 0.5 |
| IL | 3 | 0.4 |
| IN | 2 | 0.3 |
| KS | 1 | 0.1 |
| KY | 1 | 0.1 |
| ME | 1 | 0.1 |
| MI | 5 | 0.7 |
| MN | 10 | 1.3 |
| MO | 4 | 0.5 |
| MS | 1 | 0.1 |
| MT | 3 | 0.4 |
| NC | 3 | 0.4 |
| NE | 1 | 0.1 |
| NH | 1 | 0.1 |
| NJ | 1 | 0.1 |
| NM | 2 | 0.3 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation Minimum
\end{tabular} Maximum

| NY | 2 | 0.3 |
| ---: | ---: | ---: |
| OH | 4 | 0.5 |
| OR | 4 | 0.5 |
| PA | 3 | 0.4 |
| TN | 2 | 0.3 |
| TX | 6 | 0.8 |
| VA | 2 | 0.3 |
| VT | 3 | 0.4 |
| WA | 4 | 0.5 |
| WI | 8 | 1.1 |
| WV | 2 | 0.3 |
| WY | 2 | 0.2 |
| Blank | 637 | 84.5 |
| TOTAL | 754 | 100.0 |

## II. PRODUCTS AND SERVICES

1) Did your operation do any subcontracted packing services for other businesses in 1988 ?

| a. No | 1 | 109 | 14.5 |
| :--- | ---: | ---: | ---: |
| b. Yes | 2 | 6 | 0.8 |
|  | Blank | 639 | 84.7 |
|  | TOTAL | 754 | 100.0 |

2) For Subcontracted Honey Only: Please fill in the following information about honcy you packed for other businesses from 1985 to 1988. 1985 Domestic Honey Source

| Volume Packed | Non-Blank Blank | 4 | 0.5 |  | 4,312,115 | 9,227,451 | 75,000 | 20,915,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 750 | 99.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 7,403,558 |  |  |  |  |
| Total Cost of Purchased Honey | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  | Blank | 753 | 99.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 30,000 | 30,000 |  | 30,000 | 30,000 |
| Revenue Received From Scrvices | Non-Blank | 4 | 0.5 |  |  |  |  |  |
|  | Blank | 750 | 99.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 867,628 | 660,256 | 880,694 | 50,000 | 2,100,000 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$

Median

 

Standard <br>
Deviation
\end{tabular} Minimum Maximum



Qucstion $\quad$ Response $\quad$ Value \begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation Minimum Maximum
\end{tabular}



Question $\quad$ Response $\quad$ Value \begin{tabular}{cccccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation Minimum
\end{tabular} Maximum

|  | Total Cost of Purchased Honey | Non-Blank | 3 | 0.4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Blank | 751 | 99.6 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 712,370 | 131,400 | 1,120,462 | 1,710 | 2,004,000 |
|  | Revenue Received From Services | Non-Blank | 5 | 0.7 |  |  |  |  |  |
|  |  | Blank | 749 | 99.3 |  |  |  |  |  |
|  |  |  | 754 | 100.0 | 352,487 | 340,163 | 270,910 | 4,484 | 727,000 |
|  | 1988 Forcign Honey Source |  |  |  |  |  |  |  |  |
|  | Volume Packed | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 450,000 | 450,000 |  | 450,000 | 450,000 |
|  | Total Cost of Purchased Honey | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |  |
| $\pm$ |  | TOTAL | 754 | 100.0 | 180,000 | 180,000 |  | 180,000 | 180,000 |
|  | Revenue Received From Services | Non-Blank | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 753 | 99.9 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 300,000 | 300,000 |  | 300,000 | 300,000 |

3) For All Packing Services Excluding Subcontracted Services: Please fill in the following information about honey you packed from 1985 to 1988. 1985 Own Honcy

| Volume Packed | Non-Blank | 53 | 7.0 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Blank | 701 | 93.0 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 17,503 | 5,800 | 33,050 | 5 | 175,000 |
| Revenue Received From Packed Honey | Non-Blank | 44 | 5.8 |  |  |  |  |  |
|  | Blank | 710 | 94.2 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 17,630 | 5,055 | 38,442 | 130 | 221,218 |
| 985 Purchased Domestic |  |  |  |  |  |  |  |  |
| Volume Packed | Non-Blank | 20 | 2.7 |  |  |  |  |  |
|  | Blank | 734 | 97.3 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 935,584 | 83,130 | 3,459,322 | 8,580 | 15,600,000 |



| Question Response | Value | Number of Responses | Percent o Total | Mean | Median | Standard Deviation | Minimum | maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Cost of Purchased Honey | Non-Blank | 19 | 2.5 |  |  |  |  |  |
|  | Blank | 735 | 97.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 483,929 | 44,985 | 1,731,076 | 1,079 | 7,620,000 |
| Revenue Received From Packed Honey | Non-Blank | 14 | 1.9 |  |  |  |  |  |
|  | Blank | 740 | 98.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.01 | 1,086,646 | 116,752 | 2,947,619 | 6,907 | 11,215,000 |
| 1986 Purchased Foreign |  |  |  |  |  |  |  |  |
|  | Non-Blank | 9 | 1.2 |  |  |  |  |  |
|  | Blank | 745 | 98.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 973,223 | 500,000 | 1,106,410 | 46,319 | 3,400,000 |
| Total Cost of Purchased Honey | Non-Blank | 8 | 1.1 |  |  |  |  |  |
|  | Blank | 746 | 98.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 363,705 | 181,637 | 472,618 | 23,178 | 1,450,000 |
| Revenue Received From Packed Honey | Non-Blank | 8 | 1.1 |  |  |  |  |  |
|  | Blank | 746 | $98.9$ |  |  |  |  |  |
|  | TOTAL | 754 |  | 1,199,221 | 432,100 | 2,112,830 | 64,404 | 6,377,101 |
| 1987 Own Honey |  |  |  |  |  |  |  |  |
| Volume Packed | Non-Blank | 64 | 8.5 |  |  |  |  |  |
|  | Blank | 690 | 91.5 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 35,717 | 5,019 | 135,282 | 100 | 1,050,000 |
| Revenue Received From Packed Honey | Non-Blank | 51 | 6.8 |  |  |  |  |  |
|  | Blank | 703 | 93.2 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 21,477 | 5,026 | 59,455 | 208 | 409,656 |
| $\begin{array}{ll}1987 \text { Purchased Domestic } \\ \text { Volume Packed } & \text { Non-Blank } \\ \end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Volume Packed | Blank | 727 | 96.4 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 896,203 | 67,625 | 3,222,90 | 1,140 | 16,900,000 |






Question $\quad$ Response $\quad$ Value \begin{tabular}{ccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum




| Question | Response | Value | Number of <br> Responses | Percent of <br> Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1988 Total |  |  |  |  |  |  |  |  |  |
|  |  | Non-Blank | 77 | 10.2 |  |  |  |  |  |
|  | Blank | 677 | 89.8 |  |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 789,503 | 18,000 | $3,163,300$ | 100 | $20,000,000$ |  |




Question_Response Value \begin{tabular}{ccccccc}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation
\end{tabular} Minimum Maximum



| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Packing Services Beekeeping Journals |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Checked |  | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 |  | 0 | 0 |
| Packing Services Magazines | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 |  | 0 | 0 |
| Packing Services Community Bulletin Boards |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
| Checked |  | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 |  | 0 | 0 |
| Packing Services Direct Mail | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked. | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 |  | 0 | 0 |
| Packing Services Road Signs | Not CheckedChocked | 0 | 754 | 100.0 |  |  |  |  |  |
|  |  | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 |  | 0 | 0 |
| Packing Services Word of Mouth |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 745 | 98.9 |  |  |  |  |  |
| Checked |  | 1 | 9 | 1.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.01 | 0 | 0.11 | 0 | 1 |
| Packing Services Other | Not Checked Chocked | 0 | 752 | 99.7 |  |  |  |  |  |
|  |  | 1 | 2 | 0.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.05 | 0 | 1 |
| Packing Services Didn't Advertise |  |  |  |  |  |  |  |  |  |
| Not Checked Checked |  | 0 | 662 | 87.8 |  |  |  |  |  |
|  |  | 1 | 92 | 12.2 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.12 | 0 | 0.33 | 0 | 1 |

Question Response $\quad$ Value $\quad$\begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation Minimum
\end{tabular} Maximum

8 Other Products or Services Magazines

| Not Checked | 0 | 753 | 99.9 |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Checked | 1 | 1 | 0.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.04 | 0 | 1 |

Other Products or Services Community Bulletin Boards

$$
\begin{array}{lr}
\text { Not Checked } & 0 \\
\text { Checked } & 1 \\
& \text { TOTAL }
\end{array}
$$

| 100.0 | 0.00 | 0 | 0.05 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Other Products or Services Local Newspapers

| Not Checked | 0 | 751 | 99.6 |
| :--- | ---: | ---: | ---: |
| Chocked | 1 | 3 | 0.4 |
|  | TOTAL | 754 | 100.0 |

0.00
0.06

0
1
Other Products or Services Circulars

| Not Checked | 0 | 751 | 99.6 |
| :--- | ---: | ---: | ---: |
| Checked | 1 | 3 | 0.4 |
|  | TOTAL | 754 | 100.0 | 0.00 0

0.06

0
Other Products or Services Beekeeping Joumals
Nol Checked

| 0 | 752 |
| ---: | ---: |
| 1 | 2 |
| TOTAL | 754 |

$$
\begin{array}{r}
99.7 \\
0.3
\end{array}
$$

0.00
.


$$
\begin{array}{r}
753 \\
1 \\
754
\end{array}
$$

$$
\begin{array}{r}
99.9 \\
0.1 \\
100.0
\end{array}
$$

Not Checked Checked

| 0 | 750 |
| ---: | ---: |
| 1 | 4 |
| TOTAL | 754 |

99.5
0.5
100.0
0.0

0
0.0 0.07

Other Products or Services Road Signs

| Not Checked | 0 | 753 |
| :--- | ---: | ---: |
| Checked | 1 | 1 |
|  | TOTAL | 754 |


| 100.0 | 0.00 | 0 | 0.04 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |



## - SECTION C. IMPORTERS AND BROKERS

I. FIRM CHARACTERISTICS

1) Which of the following best describes your operation? (Please circle ONE response.)

| a. Full time Importer | 1 | 8 | 1.1 |
| :---: | :---: | :---: | :---: |
| b. Full time Broker | 2 | 5 | 0.7 |
| c. Full time Importer and Broker |  |  |  |
|  | 3 | 3 | 0.4 |
| d. Part time Importer | 4 | 5 | 0.7 |
| e. Part time Broker | 5 | 1 | 0.1 |
| f. Part time Importer and Broker |  |  |  |
|  | 6 | 0 | 0.0 |
|  | ank | 732 | 97.1 |
| TOT |  | 754 | 100.0 |

2) In what state do you have your primary headquarters?

| CA | 4 |
| ---: | ---: |
| CT | 1 |
| FL | 2 |
| ID | 1 |
| IL | 1 |
| MT | 1 |

Question
 Value Number of

Percent of
Standard Responses Total Mean Median Deviation Minimum

| NC | 1 |  |
| ---: | ---: | ---: |
| NJ | 4 |  |
| NY | 2 |  |
| OH | 1 |  |
| PA | 1 |  |
| TX | 1 |  |
| VA | 1 |  |
| WA | 1 | 97.1 |
| Blank | 732 | 100.0 |
| TOTAL | 754 |  |

II. PRODUCTS AND SERVICES

1) What products do you negotiate? (Circle ALL that apply.)

| a. Honey | Not Circled | 0 | 734 | 97.3 |
| :--- | :--- | ---: | ---: | ---: |
| Circled | 1 | 20 | 2.7 |  |
|  |  | TOTAL | 754 | 100.0 |

0.03
0.16

0
1
b. Other Nutritive Swecteners

| Not Cincled | 0 | 749 | 99.3 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 5 | 0.7 |
|  | TOTAL | 754 | 100.0 |

0.01 0.08 0

1
c. Other Agricultural Products

| Not Circled | 0 | 743 | 98.5 |
| :--- | ---: | ---: | ---: |
| Circled | 1 | 11 | 1.5 |
|  | TOTAL | 754 | 100.0 |

0.0
0.120

1
d. Non-Agricultural Products Not Circled

| 0 | 746 | 98.9 |
| ---: | ---: | ---: |
| 1 | 8 | 1.1 |
| TOTAL | 754 | 100.0 |

0.01
0.10

1
2) During the period of 1985 to 1988 , please indicate the quantity of honey negotiated by your operation, its source, the cost and the revenue received. 1985 Domestic Honey Source

Volume

| Non-Blank | 6 | 0.8 |
| ---: | ---: | ---: |
| Blank | 748 | 99.2 |
| TOTAL | 754 | 100.0 |


|  |  |  | Number of Responses | Percent of Total |  |  | Standard <br> Deviation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Question | Response | Value |  |  | Mean | Median | Deviation | Minimum | Maximum |


|  | Total Cost | Non-Blank Blank TOTAL | $\begin{array}{r} 3 \\ 751 \\ 754 \end{array}$ | $\begin{array}{r} 0.4 \\ 99.6 \\ 100.0 \end{array}$ | 209,466 | 14,000 | 342,897 | 9,000 | 605,399 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Revenue | Non-Blank Blank TOTAL | $\begin{array}{r} 4 \\ 750 \\ 754 \end{array}$ | $\begin{array}{r} 0.5 \\ 99.5 \\ 1000 \end{array}$ |  |  |  | 1200 |  |
|  | 1985 Foreign Honey Source Volume | Non-Blank Blank TOTAL | $\begin{array}{r} 8 \\ 746 \\ 754 \end{array}$ | $\begin{array}{r} 1.1 \\ 98.9 \\ 100.0 \end{array}$ | $3,458,047$ | 540,500 | 7,551,873 | 1,375 | 22,000,000 |
| $\stackrel{0}{0}$ | Total Cost | Non-Blank Blank TOTAL | $\begin{array}{r} 5 \\ 749 \\ 754 \end{array}$ | $\begin{array}{r} 0.7 \\ 99.3 \\ 100.0 \end{array}$ | 282,500 | 36,000 | 470,707 | 1,100 | 1,100,000 |
|  | Total Revenue | Non-Blank Blank TOTAL | $\begin{array}{r} 4 \\ 750 \\ 754 \end{array}$ | $\begin{array}{r} 0.5 \\ 99.5 \\ 100.0 \end{array}$ | 80,487 | 19,787 | 134,569 | 1,375 | 281,000 |
|  | 1986 Domestic Honey Source Volume | Non-Blank Blank TOTAL | $\begin{array}{r} 5 \\ 749 \\ 754 \end{array}$ | $\begin{array}{r} 0.7 \\ 99.3 \\ 100.0 \end{array}$ | 312,690 | 200,000 | 434,576 | 7,500 | 1,060,952 |
|  | Total Cost | Non-Blank Blank TOTAL | $\begin{array}{r} 3 \\ 751 \\ 754 \end{array}$ | $\begin{array}{r} 0.4 \\ 99.6 \\ 100.0 \end{array}$ | 152,533 | 9,000 | 253,820 | 3,000 | 445,599 |
|  | Total Revenue | Non-Blank Blank TOTAL | $\begin{array}{r} 4 \\ 750 \\ 754 \end{array}$ | $\begin{array}{r} 0.5 \\ 99.5 \\ 100.0 \end{array}$ | 196,278 | 139,500 | 207,792 | 12,000 | 494,113 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{cccc}
Number of <br>
Resoonses

 

Percent of <br>
Total

$\quad$ Mean Median 

Standard <br>
Deviation Minimum
\end{tabular} Maximum



3) How much of your negotiated honey did your operation sell through the following market outlets from 1985 to 1988 :

|  | Non-Blank | 1 | 0.1 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Blank | 753 | 99.9 |  |  |  |  |
| TOTAL | 754 | 100.0 | 300 | 300 | 300 | 300 |



Question___ Response $\quad$ Value \begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median_ 

Standard <br>
Deviation Minimum
\end{tabular} Maximum







Question
Response $\qquad$ Value Number of Percent of Mean M Median

Standard Deviation Minimum

Maximum

Honey with other Nutritive Sweeteners Local Newspapers

| Not Checked | 0 | 753 | 99.9 |
| :--- | ---: | ---: | ---: |
| Checked | 1 | 1 | 0.1 |
|  | TOTAL | 754 | 100.0 |0.1


0.00
100.0
0.0

Not Checked

| 0 | 754 |
| ---: | ---: |
| 1 | 0 |
| TOTAL | 754 |

100.0

Honey with other Nutritive Sweeteners Beekeeping Journals

| Not Checked | 0 | 753 | 99.9 |
| :--- | ---: | ---: | ---: |
| Checked | 1 | 1 | 0.1 |
|  | TOTAL | 754 | 100.0 |

0.1
100.0
0.00
99.7
0.3
0.3
100.0

$$
\begin{array}{lrr}
\text { Not Checked } & 0 & 752 \\
\text { Checked } & 1 & 2 \\
& \text { TOTAL } & 754
\end{array}
$$

100.0
0.00
100.0
0.0
0.0
100.0

Honey with other Nutritive Sweeteners Direct Mail

| eeteners Direct |  |  |  |
| :--- | ---: | ---: | ---: |
| Not Checked | 0 | 753 | 99.9 |
| Chocked | 1 | 1 | 0.1 |
|  |  | $10 T A L$ | 754 |

Honey with other Nutritive Sweeteners Road Signs

| Not Checked | 0 | 753 | 99.9 |
| :--- | ---: | ---: | ---: |
| Checked | 1 | 1 | 0.1 |
|  | TOTAL | 754 | 100.0 |



|  | Question _ Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Brokerage or Importer Services Community Bulletin Boards |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Brokerage or Importer Services Direct Mail |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Chocked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Brokerage or Importer Services Road Signs |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| $\stackrel{\square}{\square}$ | Brokerage or Importer Services Word of Mouth |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Brokerage or Importer Services Other |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
|  | Brokerage or Importer Services Didn't Advertise |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 736 | 97.6 |  |  |  |  |  |
|  | Checked | 1 | 18 | 2.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.02 | 0 | 0.15 | 0 | 1 |
|  | Other Products or Services Local Newspapers |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 753 | 99.9 |  |  |  |  |  |
|  | Checked | 1 | 1 | 0.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.04 | 0 | 1 |


|  | Question Response | Value | Number of <br> Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other Products or Services Circulars |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 753 | 99.9 |  |  |  |  |  |
|  | Checked | 1 | 1 | 0.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.04 | 0 | 1 |
| Other Products or Services Beekeeping Journals |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Other Products or Services Magazines |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 751 | 99.6 |  |  |  |  |  |
|  | Checked | 1 | 3 | 0.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.06 | 0 | 1 |
| S | Other Products or Services Community Bulletin Boards |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | . |  |  |  |  |
| Other Products or Services Direct Mail |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 753 | 99.9 |  |  |  |  |  |
| Checked |  | 1 | 1 | 0.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.04 | 0 | 1 |
| Other Products or Services Road Signs |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 754 | 100.0 |  |  |  |  |  |
|  | Checked | 1 | 0 | 0.0 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 |  |  |  |  |  |
| Other Products or Services Word of Mouth |  |  |  |  |  |  |  |  |  |
|  | Not Checked | 0 | 752 | 99.7 |  |  |  |  |  |
|  | Chocked | 1 | 2 | 0.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.05 | 0 | 1 |

Question $\quad$ Response $\quad$ Value \begin{tabular}{cc}
Number of <br>
Responses

 

Percent of <br>
Total

 Mean Median 

Standard <br>
Deviation Minimum Maximum
\end{tabular}

| Other Products or Services Other |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not Checked | 0 | 753 | 99.9 |  |  |  |  |  |
| Checked | 1 | 1 | 0.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.00 | 0 | 0.04 | 0 | 1 |
| Other Products or Services Didn't Advertise |  |  |  |  |  |  |  |  |
| Not Checked | 0 | 740 | 98.1 |  |  |  |  |  |
| Chocked | 1 | 14 | 1.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 0.02 | 0 | 0.14 | 0 | 1 |

## SECTION D. FINANCES

Total Gross Expenses

1) Please estimate the cost of the following items to your entire operation in 1988. (Please fill in the blanks for ALL that apply.)

| Labor-Hired labor | Non-Blank | 303 | 40.2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Blank | 451 | 59.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 22,175 | 3,500 | 61,157 | 20 | 728,373 |
| Labor-Hired labor benefits | Non-Blank | 71 | 9.4 |  |  |  |  |  |
|  | Blank | 683 | 90.6 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 10,489 | 3,251 | 26,584 | 132 | 209,165 |

Labor-Salaries of corporate officers, management, office labor, etc.

|  | Non-Blank | 67 | 8.9 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Blank | 687 | 91.1 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 43,689 | 27,500 | 70,306 | 100 | 400,000 |
| Bees-Bee food | Non-Blank | 409 | 54.2 |  |  |  |  |  |
|  | Blank | 345 | 45.8 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 4,704 | 600 | 13,429 | 2 | 145,530 |
| Bees-Queens and Nucs | Non-Blank | 355 | 47.1 |  |  |  |  |  |
|  | Blank | 399 | 52.9 |  |  |  |  |  |
|  | TOTAL | 754 | 100.0 | 2,004 | 500 | 4,873 | 7 | 58,871 |


|  | Question Response | Value | Number of Responses | Percent of Total | Mcan | Mcdian | Standard <br> Deviation | Minimum | m Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bces-Package Bees | Non-Blank | 80 | 10.6 |  |  |  |  |  |
|  |  | Blank | 674 | 89.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 3,648 | 1,150 | 8,306 | 27 | 67,620 |
|  | Supplies-Gcneral | Non-Blank | 547 | 72.5 |  |  |  |  |  |
|  |  | Blank | 207 | 27.5 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 3,740 | 631 | 16,462 | 5 | 256,953 |
|  | Supplies-Containers and Packaging Materials | Non-Blank | 384 | 50.9 |  |  |  |  |  |
|  |  | Blank | 370 | 49.1 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 8,724 | 500 | 65,824 | 5 | 1,152,634 |
|  | Equipment-Repair and Maintenance | Non-Blank | 467 | 61.9 |  |  |  |  |  |
|  |  | Blank | $287$ | $38.1$ |  |  |  |  |  |
|  |  | TOTAL | 754 | $\begin{array}{r} 500.1 \\ 100.0 \end{array}$ | 7,897 | 790 | 89,051 | 6 | 1,915,730 |
| $\stackrel{8}{8}$ | Equipment-Gas and Oil | Non-Blank | 488 | 64.7 |  |  |  |  |  |
|  |  | Blank | 266 | 35.3 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 4,054 | 1,242 | 9,395 | 3 | 106,586 |
|  | Buildings-Repair and Maintenance | Non-Blank | 245 | 32.5 |  |  |  |  |  |
|  |  | Blank | $509$ | $67.5$ |  |  |  |  |  |
|  |  | TOTAL | $754$ |  | 3,064 | 677 | 7,615 | 10 | 69,502 |
|  | Buildings-Mortgage | Non-Blank | $149$ | 19.8 |  |  |  |  |  |
|  |  | Blank | $605$ | $80.2$ |  |  |  |  |  |
|  |  | TOTAL | $754$ |  | 9,058 | 4,562 | 13,871 | 17 | 90,000 |
|  | Overhead Expenses-Utilities | Non-Blank | 434 | 57.6 |  |  |  |  |  |
|  |  | Blank | 320 | 42.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 2,048 | 599 | 7,058 | 5 | 125,120 |
|  | Overhead Expenses-Business Insurance | Non-Blank | 333 | 44.2 |  |  |  |  |  |
|  |  | Blank | 421 | 55.8 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 3,712 | 1,000 | 10,509 | 10 | 154,560 |




Financial Situation
2) In 1988, what was your operation's approximate gross income? (Gross income is the total income before subtracting expenses. Circle the LETTER which applies to your opcration.)

| a. $\$ 2,499$ or less | 1 | 163 | 21.6 |
| :--- | ---: | ---: | ---: |
| b. $\$ 2,500$ to 4,999 | 2 | 67 | 8.9 |
| c. $\$ 5,000$ to 9,999 | 3 | 63 | 8.4 |
| d. $\$ 10,000$ to 19,999 | 4 | 84 | 11.1 |
| e. $\$ 20,000$ to 39,999 | 5 | 68 | 9.0 |
| f. $\$ 40,000$ to 49,999 | 6 | 27 | 3.6 |
| g. $\$ 50,000$ to 99,999 | 7 | 57 | 7.6 |
| h. $\$ 100,000$ to 149,999 | 8 | 37 | 4.9 |
| i. $\$ 150,000$ to 149,999 | 9 | 10 | 1.3 |
| j. $\$ 200,000$ to 499,999 10 | 44 | 5.8 |  |
| k. $\$ 500,000$ to 999,99911 | 13 | 1.7 |  |
| l. $\$ 1,000,000$ or more 12 | 17 | 2.3 |  |
| Blank | 104 | 13.8 |  |
| $r$ TOTAL | 754 | 100.0 |  |

3) In 1988, what was your operation's net income? (Net income is gross income minus expenses. Circle the LETTER which applies.)

| a. Costs exceeded income | 1 | 125 | 16.6 |
| :--- | ---: | ---: | ---: |
| b. 8 Broke even | 2 | 51 | 6.8 |
| c. $\$ 1$ to $\$ 2,499$ | 3 | 156 | 20.7 |
| d. $\$ 2,500$ to $\$ 4,999$ | 4 | 55 | 7.3 |
| e. $\$ 5,000$ to $\$ 9,999$ | 5 | 76 | 10.1 |
| f. $\$ 10,000$ to $\$ 19,000$ | 6 | 70 | 9.3 |
| g. $\$ 20,000$ to $\$ 49,999$ | 7 | 75 | 9.9 |
| h. $\$ 50,000$ to $\$ 99,000$ | 8 | 17 | 2.3 |
| i. $\$ 100,000$ or more | 9 | 17 | 2.3 |
| Blank |  | 112 | 14.9 |
| TOTAL |  | 754 | 100.0 |

Question $\quad$ Response $\quad$ Value $\quad$\begin{tabular}{c}
Number of <br>
Responses

 

Percent of <br>
Total

$\quad$ Mean $\quad$ Median 

Standard <br>
Deviation Minimum Maximum
\end{tabular}

4) What would you estimates to be the total value of all the assets of your operation at the end of 1988 ? (Assets include land, buildings, machinery, hives, honey, beeswax and other property. Circle the LETTER which applies.)

| a. $\$ 2,499$ or less | 84 | 11.1 |
| :---: | :---: | :---: |
| b. \$2,500 to 4,999 | 49 | 6.5 |
| c. \$5,000 to 9,999 | 56 | 7.4 |
| d. \$10,000 to 19,999 | 59 | 7.8 |
| e. $\$ 20,000$ to 39,999 | 87 | 11.5 |
| f. $\$ 40,000$ to 49,999 6 | 24 | 3.2 |
| g. \$50,000 to 99,999 7 | 78 | 10.3 |
| h. \$100,000 to 149,999 8 | 40 | 5.3 |
| i. \$150,000 to 199,999 9 | 37 | 4.9 |
| j. \$200,000 to 499,999 10 | 74 | 9.8 |
| k. \$500,000 to 999,999 11 | 32 | 4.2 |
| 1. \$1,000,000 to 1,499,999 |  |  |
| 12 | 15 | 2.0 |
| m. \$1,500,000 to 1,999,999 |  |  |
| 13 | 4 | 0.5 |
| n. \$2,000,000 or more 14 | 13 | 1.7 |
| Blank | 102 | 13.5 |
| TOTAL | 754 | 100.0 |

5) What was the approximate total amount of debt on the assets of your operation at the end of 1988 ? (Circle the LETTER which applies.)

| a. No debt | 1 | 386 | 51.2 |
| :--- | :--- | ---: | ---: |
| b. $\$ 2,499$ or less | 2 | 33 | 4.4 |
| c. $\$ 2,500$ to 4,999 | 3 | 25 | 3.3 |
| d. $\$ 5,000$ to 9,999 | 4 | 31 | 4.1 |
| e. $\$ 10,000$ to 19,999 | 5 | 28 | 3.7 |
| f. $\$ 20,000$ to 39,999 | 6 | 46 | 6.1 |
| g. $\$ 40,000$ to 49,999 | 7 | 13 | 1.7 |
| h. $\$ 50,000$ to 99,999 | 8 | 31 | 4.1 |
| i. $\$ 100,000$ to 149,999 | 9 | 24 | 3.2 |
| j. $\$ 150,000$ to 199,99910 | 13 | 1.8 |  |
| k. $\$ 200,000$ to 499,99911 | 15 | 2.0 |  |
| l. $\$ 500,000$ to 999,99912 | 4 | 0.5 |  |
| m. $\$ 1,000,000$ to $1,499,999$ |  |  |  |
|  | 13 | 2 | 0.3 |

Question
Response Number of Percent of
n. $\$ 1,500,000$ to $1,999,999$
$\begin{array}{rrr}14 & 2 & 0.3 \\ \text { o. } \$ 2,000,000 \text { or more } 15 & 3 & 0.4 \\ \text { Blank } & 98 & 13.0 \\ \text { TOTAL } & 754 & 100.0\end{array}$

| 3.15 | 1 | 3.21 | 1 |
| :--- | :--- | :--- | :--- |

## SECTION E. PERSONAL INFORMATION

1) Which of the following best describes the location of your primary residence? (Please circle the LETTER where you live most of the year.)
a. Farm $\quad 1 \quad 186 \quad 24.7$
b. Rural but not farm 20527.2
c. Community under 2,500
$3 \quad 117 \quad 15.5$
d. Community 2,500 or more but less than 25,000

496
12.7
e. Community 25,000 or more but less than 50,000
f. Community 50,000 or more but less than 100,000
g. Community 100,000 or more

| 7 | 48 | 6.4 |
| ---: | ---: | ---: |
| Blank | 49 | 6.5 |
| TOTAL | 754 | 100.0 |

$2.77 \quad 2$
$1.73 \quad 1$
2) How many people, including yourself, live at your present address?

| a. Under 6 years old | 0 | 547 | 72.5 |
| :---: | :---: | :---: | :---: |
|  | 1 | 60 | 8.0 |
|  | 2 | 43 | 5.7 |
|  | 3 | 7 | 0.9 |
|  | 4 | 2 | 0.3 |
|  | Blank | 95 | 12.6 |
|  | TOTAL | 754 | 100.0 |
| b. 6 to 12 years old | 0 | 505 | 67.0 |
|  | 1 | 79 | 10.5 |
|  | 2 | 57 | 7.6 |
|  | 3 | 14 | 1.9 |



| Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard <br> Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | d. 13 to 15 years | 4 | 156 | 20.7 |  |  |  |  |  |
|  | e. 16 or more years | 5 | 228 | 30.2 |  |  |  |  |  |
|  |  | ank | 42 | 5.6 |  |  |  |  |  |
|  |  |  | 754 | 100.0 | 3.66 | 4 | 1.18 | 1 | 5 |

5) What do you consider your major occupation?

| a. Clerical | 1 | 5 | 0.7 |
| :---: | :---: | :---: | :---: |
| b. Professional | 2 | 66 | 8.7 |
| c. Managerial | 3 | 24 | 3.2 |
| d. Technician | 4 | 25 | 3.3 |
| e. Labor | 5 | 49 | 6.5 |
| f. Own my own busin |  | 47 | 6.2 |
| g. Sales | 7 | 10 | 1.3 |
| h. Bcekceper/producer | 8 | 239 | 31.7 |
| i. Farmer | 9 | 32 | 4.2 |
| j. Retired | 10 | 78 | 10.3 |
| k. Other | 11 | 45 | 6.0 |
| $h$ and $j$ | 12 | 4 | 0.5 |
| $e$ and $j$ | 13 | 1 | 0.1 |
| a and j | 14 | 3 | 0.4 |
| $f$ and j | 15 | 2 | 0.3 |
| $d$ and $i$ | 16 | 2 | 0.3 |
| f and h | 17 | 5 | 0.7 |
| i and j | 18 | 1 | 0.1 |
| $d$ and $h$ | 19 | 1 | 0.1 |
| e and h | 20 | 5 | 0.7 |
| $h$ and $k$ | 21 | 1 | 0.1 |
| $b$ and $j$ | 22 | 1 | 0.1 |
| $h$ and $i$ | 23 | 1 | 0.1 |
| $f$ and $i$ | 24 | 4 | 0.5 |
| $b$ and $i$ | 25 | 1 | 0.1 |
| $b$ and $f$ | 26 | 8 | 1.1 |
| c and j | 27 | 2 | 0.3 |
| c and d | 28 | 5 | 0.7 |
| c and f | 29 | 2 | 0.3 |
| $b$ and $h$ | 30 | 2 | 0.3 |


| Question | Response | Value | Number of Responses | Percent of Total | Mcan | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | f and $k$ | 31 | 4 | 0.5 |  |  |  |  |  |
|  | g and h | 32 | 21 | 2.8 |  |  |  |  |  |
|  | $e$ and $f$ | 33 | 6 | 0.8 |  |  |  |  |  |
|  | c and h | 34 | 4 | 0.5 |  |  |  |  |  |
|  | j and k | 35 | 1 | 0.1 |  |  |  |  |  |
|  | $i$ and $k$ | 36 | 1 | 0.1 |  |  |  |  |  |
|  | c ande | 37 | 1 | 0.1 |  |  |  |  |  |
|  | $e$ and i | 38 | 1 | 0.1 |  |  |  |  |  |
|  |  | Blank | 44 | 5.8 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 9.51 | 8 | 7.33 | 1 | 38 |
| 6) Is this occupation the major source of your household's income? |  |  |  |  |  |  |  |  |  |
|  | a. No | 1 | 221 | 29.3 |  |  |  |  |  |
|  | b. Yes | 2 | 477 | 63.3 |  |  |  |  |  |
|  |  | Blank | 56 | 7.4 |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 1.68 | 2 | 0.47 | 1 | 2 |
| 7) How long have you been a producer, packer, importer, or broker in the beekeeping industry? |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  | Blank | 65 754 | ${ }_{100.6}$ |  |  |  |  |  |
|  |  | TOTAL | 754 | 100.0 | 19.66 | 15 | 13.92 | 0 | 85 |

8) Which income category best describes the annual gross income for all wage earners in your immediate family living with you last year?

| a. Less than 9,999 | 1 | 74 | 9.8 |
| :--- | ---: | ---: | ---: |
| b. $\$ 10,000$ to 19,999 | 2 | 99 | 13.1 |
| c. $\$ 20,000$ to 39,999 | 3 | 214 | 28.4 |
| d. $\$ 00,000$ to 69,999 | 4 | 163 | 21.6 |
| e. $\$ 70,000$ to 99,999 | 5 | 53 | 7.0 |
| f. $\$ 100,000$ to 149,999 | 6 | 30 | 4.0 |
| g. $\$ 150,000$ to 199,999 | 7 | 4 | 0.5 |
| h. $\$ 200,000$ to 499,9998 | 11 | 1.5 |  |
| i. $\$ 500,000$ to $1,000,0009$ | 3 | 0.4 |  |
| j. $O v e r ~$ |  |  |  |
| $1,000,000,10$ | 1 | 0.1 |  |
| Blank | 102 | 13.5 |  |
| TOTAL | 754 | 100.0 |  |


|  | Question | Response | Value | Number of Responses | Percent of Total | Mean | Median | Standard Deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9) How old were you on your last birthday? |  |  |  |  |  |  |  |  |  |
|  |  |  | Non-Blank | 709 | 94.0 |  |  |  |  |  |
|  |  |  | Blank | 45 | 6.0 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 51.20 | 50 | 13.37 | 20 | 89 |
|  | 10) Are you: |  |  |  |  |  |  |  |  |  |
|  |  | a. Female | 1 | 37 | 4.9 |  |  |  |  |  |
|  |  | b. Male | 2 | 673 | 89.3 |  |  |  |  |  |
|  |  |  | Blank | 44 | 5.8 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 1.95 | 2 | 0.22 | 1 | 2 |
|  | 11) How long did it take you to complete this questionnaire? |  |  |  |  |  |  |  |  |  |
|  |  |  | Non-Blank | 634 | 84.1 |  |  |  |  |  |
|  |  |  | Blank | 120 | 15.9 |  |  |  |  |  |
|  |  |  | TOTAL | 754 | 100.0 | 98 | 60 | 113 | 2 | 973 |
| $\stackrel{\rightharpoonup}{u}$ |  |  |  |  |  |  |  |  |  |  |

## APPENDIX:

NATIONAL SURVEY INSTRUMENT

## HONEY INDUSTRY SURVEY



The purpose of this survey is 10 collect information to identify the needs and current economic status of the honey industry. Information from this study will be provided by the Economic Research Service of the U.S. Department of Agriculture to members of the U.S. Congress to assist them in establishing a pricing policy that reflects the needs of the industry. This information will aid the National Honey Board's development of research, advertising and promotion programs which will best serve the industry.

## Conducted by

The Department of Agricultural Economics
Neu York State College of Agriculture and Life Sciences
Cornell University, Ithaca, New York 14853-7801

Form Approved
O.M.B. No. 0536-0035

Expiration Date 6/30/91

## HONEY PRODUCERS, PACKERS, IMPORTERS AND BROKERS SURVEY

## INTRODUCTION:

The Cornell Institute for Social and Economic Research (CISER) is collecting information relative to honey production, pollination and the structure of your beekeeping operation. This study of the beekeeping industry is mandated by Congress in the 1987 Appropriations Bill. The information will be used by analysts at Comell University, the National Honey Board, and the United States Department of Agriculture.

Your response is confidential and will be used only for statistical purposes and economic analysis. Although your paricipation is voluntary, your cooperation is essential to help us determine the economic health of the beekeeping industry. We encourage you to make the information as accurate as possible. The survey is also suppored by the American Beekeeping Federation, the American Honey Producers Association and the National Honey Packers \& Dealers Association.

Public reporing burden for this collection of information is estimated to average one hour ( 60 minutes) per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collected information. Send comments regarding this burden estimate or any other a spect of collection of information, including suggestions for reducing this burden to:

Department of Agriculture, Clearance Officer
O.I.R.M Room 404 - W

Washington D.C. 20250
and to the: Office of Management and Budget
Paperwork Reduction Project (O.M.B. No. 0536-0035) Washington D.C. 20502

Cover phoro courtesy of National Honey Board

## ANSWER THIS QUESTION FIRST

How would you classify yourselt in the honey industry? (Please circie ALL thal apoly.)
a PRODUCER
b. PACKER
c. IMPORTER
$\longrightarrow$ If not a producer ALSO, Skip to Section B. page 13
d. BROKER

## SECTION A. PRODUCERS

## I. FIRM CHARACTERISTICS

1) Is beekeeping your: (Please circle ONE response.)
a. Full time profession
b. Par time profession
c. Hobby
2) What state do you consider the primary headquarters for your beekeeping operation?
3) Is your actual residence in the same state as your primary beekeeping headquarters?
$\begin{array}{ll}\text { a. } & \text { No } \longrightarrow \text { If no: In what state is your actual residence? } \\ \text { b. } & \text { Yes }\end{array}$ $\qquad$
4) Which of the following years did you NOT have a beekeeping operation? (Circle ALL that apply.)

| a. | 1981 | d. | 1984 | g. | 1987 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b. | 1982 | e. | 1985 | h. | 1988 |
| c. | 1983 | f | 1986 |  |  |

5) We would like to know your operation's peak production history during each of the last four years and the number of working colonies you had during that time. (Piease fill in the information for the years when you had a beekeeping operation in the spaces provided. Write " 0 " if none.)


## Appendix: National Survey Instrument (continued)

## II. PRODUCTS AND SERVICES

## Receipts and Production:

1) What were your total gross receipts from products sold, services provided and/or program participation from 1985 to 1988 ?

Please write: NA - if you DID NOT produce or provide specific products or services or participate in programs for that year.
0 - If you DID NOT receive any money for specific products, services or programs your operation had for that year.

2) How much of the following did your beekeeping operation produce or provide from 1985 to 1988?

|  | CALENDAR YEAR |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Pr | 1985 | 1986 | 1987 | 1988 |
| Honey | Ibs | lbs | Ibs | 16 |
| Beeswax | lbs | Ibs | Ibs | Ib |
| Royal jelly, Propolis and Pollen | lbs | Ibs | Ibs |  |
| Package Bees | Ibs | Ibs | Ibs | Ibs |
| Nucs | \# | * |  | - |
| Queens Sold Separately | \# | * | \# | * |
| Pollination Services * of Colonies \# of Rentals | $\ldots * * *$ | _* | - | * |

3) Of the products and services provided by your beekeeping operation referted to in Question 2, which three do you consider most important to your operation? (Please write down the items in the spaces provided in the order of their importance to your operation.)

4) Did your beekeeping operation suffer a reduction in production for any of the following reasons from 1985 to 1988? (CHECK where appropriate.)

|  | CALENDAR YEAR |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Reason | 1985 | $1986^{\circ}$ | $\underline{1987}$ | $\underline{1988}$ |
| Drought | - | - | - | - |

Disease _-_ $\qquad$
$\qquad$
$\qquad$
Mites $\qquad$
$\qquad$
$\qquad$
$\qquad$
Other (Specify)

| -__ |  |
| :---: | :---: |
|  |  |

## Honey Marketing:

5) During the period of 1985 to 1988 what percent of the honey you marketed was white, extra light amber, light amber or amber?

PERCENT OF TOTAL HONEY MARKETED FOR CALENDAR YEAR

| Honey Marketed | 1985 | 1986 | 1987 | 1988 |
| :---: | :---: | :---: | :---: | :---: |
| White | \% | \% | \% | $\%$ |
| Extra Light Amber | \% | _\% | \% | \% |
| Light Amber | \% | -\% | \% | \% |
| Amber | \% | [\% | [ \% | \% |

## Appendix: National Survey Instrument (continued)

6) Drring the period of 1985 to 1988 , which of the following markets did you use to dispose of your honey crop and what was the amount of honey sold in each market? (Each honey crop year's total should agree with the honey production you reported in Question 2.)

Please write NA - if you DID NOT use that specific outlet in a given year.

|  | POUNDS SOLD FOR CALENDAR YEAR |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Markets Used | 1885 | 1986 | 1987 | 1988 |
| Roadside Market | Ibs | Ibs | $\ldots \mathrm{lbs}$ | $\ldots \mathrm{Ibs}$ |
| Retail Stores | lbs | lbs | _lbs | $\ldots \mathrm{lbs}$ |
| Institutions | Ibs | $\ldots \mathrm{l}$ lbs | _ibs | _lbs |
| Broker or Dealer | _lbs | $\ldots \mathrm{lbs}$ | $\ldots$ lbs | $\ldots \mathrm{lbs}$ |
| Packers/Botters Independent | lbs | $\ldots$ __lbs | _Ibs | Ibs |
| Cooperative | Ibs | $\ldots \mathrm{lbs}$ | $\ldots$ Ibs | $\ldots \mathrm{lbs}$ |
| Direct Export | Ibs | _lbs | Ibs | $\ldots \mathrm{lbs}$ |
| Industrial User or Food Manufacturer | _lbs | $\ldots$ _lbs | $\ldots \mathrm{lbs}$ | _Ibs |
| Forfeited to CCC | Ibs | $\ldots$ ___lbs | $\ldots$ _lbs | $\ldots \mathrm{l}$ bs |
| Other Outlet (Specify) | $\ldots$ Ibs | $\ldots \mathrm{lms}$ | ___Ibs | _lbs |
|  | $\ldots$ _lbs | $\ldots \ldots \mathrm{l} \mathrm{l}^{\text {bs }}$ | $\ldots$ __Ibs | $\ldots \mathrm{Ibs}$ |
| Not Sold or In Storage | $\ldots$ _lbs | $\ldots \ldots \mathrm{lbs}$ | $\ldots$ _lbs | $\ldots$ _lbs |
| TOTAL | $\ldots \mathrm{Ibs}$ | $\ldots$ __lbs | $\ldots \ldots$ Ibs | $\ldots$ Ibs |

## Government Honey Price Support Program:

7) Since the 1981 crop year, have you participated in the govemment honey price support program?

$$
\begin{aligned}
& \text { a. } \quad \text { No } \longrightarrow \text { Skip to Question 9, page } 6 \text {. } \\
& \text { b. } \\
& \text { Yes }
\end{aligned}
$$

8) Please fill in the information for honey your operation placed under loan with the government honey price support program from 1981 to 1988.

> Please write: NA - if you DID NOT participate in the program that year.
> 0 - It you participated in the program but DID NOT FORFEIT ANY HONEY to the CCC or receive net receipts.

| Honey Crop Year | Quantity Placed Under Loan | Quantity Forfeited 10 CCC | Net Receipts from Gov'i Payments |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Marketing Loan |
|  |  |  | Forfeitures | Benefil |
| 1981 | _lbs | lbs | \$ |  |
| 1982 | Ibs | lbs | \$ |  |
| 1983 | Ibs | lbs | \$ |  |
| 1984 | Ibs | Ibs | \$ |  |
| 1985 | Ibs | lbs | \$ |  |
| 1986 | Ibs | Ibs | \$ | \$ |
| 1987 | _lbs | Ibs | \$ | \$ |
| 1988 | Ibs | Ibs | \$ | \$ |

* Difference between loan rate and repayment rate.

9) For the years that you did not participate in the government honey price support program and had a beekeeping operation:

Which of the following best describes why you did not participate? (Circle ALL that apply.)
a. I received a higher price through local markets.
b. I did not produce enough honey to use the program.
c. I was not familiar with how the program worked.
d. It took too much time to complete the paper work.
c. Cooperative placed honey under loan for me.
f. Other (Specify)
10) In your opinion, how would your operation be affected if the federal honey suppon program were eliminated? (Please circle ALL that apply.)
a. COULD NOT CONTINUE being a beekeeper.
b. Would MAINTAIN the size of my operation.

Would DECREASE the size of my operation.
Would EXPAND the size of my operation. Would DIVERSIFY into other areas of beekeeping.

If e.: Would diversify into: $\qquad$
f. Other changes (Please specify.) $\qquad$

Bee Colony Transport:
11) a. Did you transport any of your bee colonies to other states in 1985, 1986, 1987 or 1988? (Circle ONE letter for each year.)

| 1985 | 1986 | 1987 | 1988 |
| :--- | :--- | :--- | :--- |
| a. Yes | a. Yes | 2. Yes | a. Yes |

- b. No, I did not transport bee colonies to other states in 1985, 1986. 1987 or $1988 \Longrightarrow$ Skip to Question I Ic, below.
b. If you transported any of your bee colonies to other states, what was the main purpose? (Please check where appropriate)

Main Purpose for Transporting Bees $1985 \quad 1986 \quad 1987 \quad 1988$
a. Provide paid pollination services
b. Seek floral source for honey prod'n
c. Wintering
d. Other (Specify) $\qquad$

c. What is your best estimate of the total mileage for transporting your bee colonies in each year for any reason? Total mileage includes all transporting activities to and from home location within state as well as between states for all vehicles.
a. 1985 $\qquad$ miles
b. 1986 $\qquad$ miles
c. 1987 $\qquad$ miles
d. 1988 $\qquad$ miles

## Appendix: National Survey Instrument (continued)

## Pollination Services:

12) Did your operation transpor bee colonies to one or more locations during 1985, 1986, 1987 or 1988 to provide paid pollination services?

13) Please answer the following questions based on your most recent experience.
a. For which year are you providing information on pollination services?

$$
19 .
$$

$\qquad$
b. How many of your colonies were used at the start of the pollination season?
$\qquad$
c. How many of your colonies were being used at the end of the pollination season?
$\qquad$ * of COLONIES
d. How many times were your colonies relocated during the year to provide paid or unpaid pollination services?
$\qquad$ * of TIMES RELOCATED
e. How many total miles were your colonies transported during a year to provide pollination services? (Please approximate if unsure. Total miles includes all transporting activities to and from home location within state as well as between states.)
$\qquad$
TOTAL MLES

## Appendix: National Survey Instrument (continued)

f. In the table below, please indicate the state(s) where your colonies provide paid pollination services, the main crops pollinated, colonies used, and applicable pollination fees received. Begin with the first crops pollinated in the year and proceed throughout the year. If more than one crop is pollinated in a state, report additional crops in the second column.

14) Please identify where your colonies that are used to provide paid pollination services are over-wintered.

| Location (State) | Number of Colonies |
| :--- | :--- |
| - | - |

## Appendix: National Survey Instrument (continued)

1) Did your beekeeping operation incur losses from pesticides during 1988 ?
a.
b.
Yes $\longrightarrow$ Skip to Question 6, below.
2) What percent of your colonies were affected by pesticides in 1988?
$\qquad$ \% COLONIES AFFECTED
3) What percent of your affected colonies suffered $50 \%$ or more loss of honey bees from pesticides?
$\qquad$ \% COLONIES WITH 50\% LOSS
4) Where did most of your losses occur? (Circle ONE answer.)

| a. | Colony |
| :--- | :--- |
| b. | Field |
| c. | Both |

5) Are you normally reimbursed for your honey bee losses from pesticides?
a. No
b. Yes
6) Does your beekeeping operation normally incur winter losses?
a. No $\quad$ Skip to Section IV, page 11 .
7) What percent of your colonies are affected by winter loss each year?
$\qquad$ \% COLONIES AFFECTED
8) What percent of your affected colonies suffered $50 \%$ or more winter loss of honey bees?
\% COLONIES WITH 50\% LOSS

## Appendix: National Survey Instrument (continued)

9) What method do you use to replace winter losses? (Circle ALl that apply.)
a. Package bees
b. Divisions with purchased queens
c. Divisions with queens raised by the beekeeper using a natural queen cell
d. Divisions with queens raised by the beekeeper using a grafted queen cell

## LABOR USE

1) What is the average number of hours per week each of the following have spent on your entire operation in 1988? (Please fill in the blanks provided.)

Please write: NA - Hy you DID NOT USE a specific labor source during a given time.

|  | Jan-Mar (hours/week) | Apr-Jun (hours/week) | Jul-Sep (hours/week) | Oct-Dec (hours/week) |
| :---: | :---: | :---: | :---: | :---: |
| Yourself |  |  |  |  |
| Other Family Members |  |  |  |  |
| Hired Labor |  |  |  |  |
| Full Time |  |  |  | - |
| Part Time |  |  |  |  |

2) What is the average wage rate paid by your operation for each of the following?
a. Full time hired labor? $\qquad$ dollars/hour.
b. Pant time hired labor? $\qquad$ dollars/hour

## V. ADVERTISING AND PROMOTIONAL ACTIVIIIES

1) Where did you advertise your products and services in 1988? Exclude contributions for advertising and promotion done by marketing cooperatives and the National Honey Board. (Please put a CHECK on the appropriate spaces.)


Other (Please List)

2) Which of the following beekeeping promotional activities did you participate in during 1988? (Circle ALL that apply.)

[^0]Appendix: National Survey Instrument (continued)

| SECTION B |  |
| :---: | :---: |
| If you are: |  |
| - a PRODUCER only | Skip to Section D, Page 21 |
| - a PACKER | Continue with Section B, Page 14 |
| - All Others | Skip to Section C, Page 17 |

## SECTION B. PACKERS

## I. FRRM CHARACTERISTICS

I) Are you a: (Please circle ONE response.)
a. Full time Packer
b. Part time Packer;

Other time spent on beekeeping activities
c. Part time Packer

Other time spent on non-beekeeping activities
2) In what state do you have your packing facilities?

II PRODUCTS AND SERVICES

1) Did your operation do any subcontracted packing services for other businesses in 1988?
a. $\quad \mathrm{No} \longrightarrow$ Skip to question 3, page 15.
b. Yes
2) FOR SUBCONTRACTED HONEY ONLY:

Please fill in the following information about honey you packed for other businesses from 1985 to 1988.

Please write: NA - K you DID NOT accept any subcontracts that year

| Calendar <br> Year | Honey <br> Source | Volume Packed | Total Cost of Purchased Honey | Revenue Received From Services |
| :---: | :---: | :---: | :---: | :---: |
| 1985 | Domestic Foreign |  | $\$$ | $\$$ |
| 1986 | Domestic Foreign |  | $\$$ | $\$$ |
| 1987 | Dornestic Foreign | __lbs | $\$$ | $\$$ |
| 1988 | Domestic Foreign |  | $\$$ | $\$$ |

## Appendix: National Survey Instrument (continued)

3) For All Packing Services Excluding Subcontracted Services:

Please fill in the following information about honey you packed from 1985 to 1988.
$\left.\begin{array}{cccc}\text { Calendar } & \begin{array}{c}\text { Honey } \\ \text { Source }\end{array} & \begin{array}{c}\text { Volume } \\ \text { Packed }\end{array} & \begin{array}{c}\text { Total Cost } \\ \text { of Purchased } \\ \text { Honey }\end{array}\end{array} \begin{array}{c}\text { Revenue Received } \\ \text { From Packed } \\ \text { Honey }\end{array}\right]$

| 1985 Own Honey | lbs |  | \$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Purchased Domestic | lbs | \$ | \$ |  |
| Purchased Foreign | lbs | \$ | \$ |  |
| 1986 Own Honey | lbs |  | \$ |  |
| Purchased Domestic | Ibs | \$ | \$ |  |
| Purchased Foreign | lbs | \$ | \$ |  |
| 1987 Own Honey | Ibs |  | \$ |  |
| Purchased Domestic | lbs | \$ | \$ |  |
| Purchased Foreign | lbs | \$ | \$ |  |
| 1988 Own Honey | lbs |  | \$ |  |
| Purchased Domestic | lbs | \$ | \$ |  |
| Purchased Foreign | lbs | \$ | \$ |  |

4) How much honcy did your operation sell through the following market outlets from 1985 to 1988 ?

| Markets Used | POUNDS SOLD FOR CALENDAR YEAR |  |  | 1988 |
| :---: | :---: | :---: | :---: | :---: |
| Roadside Market | lbs | Ibs | _lbs | _lbs |
| Retail Stores | lbs | __lbs | _lbs | _lbs |
| Institutions | _lbs | _lbs | $\ldots$ Ibs | _lbs |
| Broker or Dealer | lbs | Ibs | $\ldots$ Ibs | _lbs |
| Direct Export | lbs | _lbs | lbs | _lbs |
| Industrial User or Food Manufacturer | _lbs | lbs | _lbs | _lbs |
| Oher Outlet (Specify) | Ibs | lbs | _lbs | Ibs |
|  | _lbs | _lbs | $\ldots \mathrm{lbs}$ | _lbs |
| Not Sold or In Storage | _lbs | __lbs | _lbs | $\ldots$ _lbs |
| TOTAL | _lbs | _Ibs | $\ldots \mathrm{lbs}$ | __lbs |

## Appendix: National Survey Instrument (continued)

## III. ADVERTISING AND PROMOTIONAL ACTIVITIES

1) Where did you adverise your products and services in 1988? (Please put a CHECK on the appropriate spaces.)


Appendix: National Survey Instrument (continued)


## SECTION C. IMPORTERS AND BROKERS

I. FIRM CHARACTERISTICS

1) Which of the following best describes your operation? (Please circle ONE
response.)
a. Full time Importer
b. Full time Broker
c. Full time Importer and Broker
d. Part time Importer
e. Part time Broker
f. Part ime Importer and Broker
2) In what state do you have your primary headquarters?
II. PRODUCTS AND SERVICES
3) What products do you negotiate? (Circle ALL that apply.)
a. Honey
6. Other Nutritive Sweeteners (e.g. corn syrup, sugar, etc.)
c. Oher Agriculcural Products
d. Non-Agricultural Products
2) During the period of 1985 to 1988 , please indicate the quantity of honey negotiated by your operation, its source, the cost, and the revenue received.

| Calendar <br> Year | Honey Source | Volume | Total Cost | Total Revenue |
| :---: | :---: | :---: | :---: | :---: |
| 1985 | Domestic Foreign | lbs | \$ | \$ |
|  |  | Ibs | \$ | \$ |
| 1986 | Domestic Foreign | Ibs |  | \$ |
|  |  |  |  | \$ |
| 1987 | Domesuic Foreign | Ibs |  |  |
|  |  | -lbs | \$ | \$ |
| 1988 | Domestic Forcign | Ibs | \$ | \$ |
|  |  | Ilbs | \$ | \$ |

## Appendix: National Survey Instrument (continued)

3) How much of your negotiated honey did your operation sell through the following market outets from 1985 to 1988 ?

Please write NA - if you DID NOT use that specific outlet in a given year.

| Markets Used | 1985 | $\begin{aligned} & \text { POUNI } \\ & \text { CALE } \\ & 1986 \end{aligned}$ | SOLD FOR AR YEAR 1987 | 1988 |
| :---: | :---: | :---: | :---: | :---: |
| Roadside Marke: | lbs | Jbs | lbs | Ibs |
| Retail Stores | Ibs | _lbs | _lbs | lbs |
| Instutions | Ibs | 1bs | $\ldots \mathrm{lbs}$ | Ibs |

Packers/Botters
Independent $\qquad$ Ibs $\qquad$ lbs $\qquad$ los $\qquad$ Ibs

Cooperative $\qquad$ lbs $\qquad$ lbs $\qquad$ Ibs $\qquad$ Ibs

## Direct Expor

$\qquad$ Ibs $\qquad$ Ibs $\qquad$ Ibs $\qquad$ lbs

Industrial User or Food Manufacturer $\qquad$ Ibs $\qquad$ Ibs $\qquad$ Ibs $\qquad$ Ibs

Other Outet (Specify)
$\qquad$
$\qquad$ Ibs $\qquad$ Ibs $\qquad$ lbs $\qquad$ lbs
$\qquad$
$\qquad$ Ibs $\qquad$ Ibs $\qquad$ Ibs $\qquad$ Ibs

Not Sold or In Storage

TOTAL $\qquad$ lbs $\qquad$ lbs $\qquad$ Ibs $\qquad$ lbs

## Appendix: National Survey Instrument (continued)

1) Where did you advertise your products and services in 1988? (Please put a CHECK on the appropriate spaces.)

[^1]
## Appendix: National Survey Instrument (continued)

Financial Situation: -Please answer the following questions with regard to your entire boekeeping and/or marketing operation.
2) In 1988, what was your operation's approximate gross income? (Gross income is the total income before subtracting expenses. Circle the LETTER which appise; to your operation.)

| a. | $\$ 2,499$ or less | g. | $\$ 50,000$ to $\$ 99,999$ |
| :--- | :--- | :--- | :--- |
| b. | $\$ 2,500$ to $\$ 4,999$ | h. | $\$ 100,000$ to $\$ 149,999$ |
| c. | $\$, 000$ to $\$ 9,999$ | i. | $\$ 150,000$ to $\$ 199,999$ |
| d. | $\$ 10,000$ |  |  |
| c. | $\$ 20,000$ to $\$ 39,999$ | j. | $\$ 200,000$ to $\$ 499,999$ |
| f. | $\$ 0,000$ to $\$ 49,999$ | k. | $\$ 500,000$ to $\$ 999,999$ |
|  |  | l. | $\$ 1,000,000$ or more |

3) In 1988, what was your operation's net income? (Net income is gross income minus expenses. Circle the LETTER which applies.)

| a. | Costs exceeded income | e. | $\$ 5,000$ to $\$ 9,999$ |
| :--- | :--- | :--- | :--- |
| b. Broke even | f. | $\$ 10,000$ to $\$ 19,999$ |  |
| c. $\$ 1$ to $\$ 2,499$ | g. | $\$ 20,000$ to $\$ 49,999$ |  |
| d. $\$ 2,500$ to $\$ 4,999$ |  |  |  |
|  |  | h. | $\$ 100,000$ to $\$ 99,999$ |
|  |  |  |  |

4) What would you estimate to be the total value of all the assets of your operation at the end of 1988? (Assets include land, buildings, machinery, hises. honey, beeswax and other property. Circle the LETTER which applies.)

| a. | $\$ 2,499$ or less |
| :--- | :--- |
| b. | $\$ 2,500$ to $\$ 4,999$ |
| c. | $\$ 5,000$ to $\$ 9,999$ |
| d. | $\$ 10,000$ to $\$ 19,999$ |
| c. | $\$ 20,000$ to $\$ 39,999$ |
| f. | $\$ 40,000$ to $\$ 49,999$ |
| g. | $\$ 50,000$ to $\$ 99,999$ |


| h. | $\$ 100,000$ to $\$ 149,999$ |
| :--- | :--- |
| i. | $\$ 150,000$ to $\$ 199,999$ |
| j. | $\$ 200,000$ to $\$ 499,999$ |
| k | $\$ 500,000$ to $\$ 999,999$ |
| l. | $\$ 1,000,000$ to $\$ 1,499,999$ |
| m. | $\$ 1,500,000$ to $\$ 1,999,999$ |
| n. | $\$ 2,000,000$ or more |

5) What was the approximate total amount of debt on the assets of your opera:. :at the end of 1988? (Circle the LETTER which applies.)

| a. | No debt |
| :--- | :--- |
| b. | $\$ 2,499$ or less |
| c. | $\$ 2,500$ to $\$ 4,999$ |
| d. | $\$ 5,000$ to $\$ 9,999$ |
| e. | $\$ 10,000$ to $\$ 19,999$ |
| f. | $\$ 20,000$ to $\$ 39,999$ |
| g. | $\$ 40,000$ to $\$ 49,999$ |
| h. | $\$ 50,000$ to $\$ 99,999$ |

[^2]
## Appendix: National Survey Instrument (continued)

## SECTION E. PERSONAL INFORMATION

1) Which of the following best describes the location of your primary residence? (Please circle the LETTER where you live most of the year.)
a. Farm
b. Rural but not farm
c. Community under 2,500
d. Community 2,500 or more but less than 25,000
e. Community 25,000 or more but less than 50,000
f. Community 50,000 or more but less than 100,000
g. Community 100,000 or more
2) How many people, including yourself, live at your present address? (Please fill in the blanks. Put " 0 " where applicable.)
a. Under 6 years old
b. 6 to 12 years old
c. 13 to 18 years old
d. 19 or older $\qquad$
3) What is your current marital status? (Please circle ONE response.)
a. Married
b. Single
c. Widowed/Divorced/Separated
4) How many years of school did you complete? (Please circle ONE response.)

|  | 1 to years | (Elementary school only) |
| :--- | :--- | :--- |
| a. | 9 to 11 years | (Anended some high school) |
| b. | 12 years | (Graduated high school) |
| c. | 13 to 15 years | (Atended college) |
| d. | 16 or more years | (Graduated college) |

-) What do you consider your major occupation? (Circle the LETTER which best describes your occupation.)

| b. |  | $f$. |  |
| :---: | :---: | :---: | :---: |
|  | Clerical |  | $\begin{aligned} & \text { farming) } \\ & \text { Sales } \end{aligned}$ |
|  | Professional (teacher, lawyer, etc) | $g$. |  |
| c. | lawyer, etc) <br> Managerial | h. | Beckee |
| d. | Technician | $i$. | Farmer |
| e. | Labor (construction, factory, etc.) |  |  |
|  |  | $\mathfrak{j}$ |  |

## Appendix: National Survey Instrument (continued)

6) Is this occupation the major source of your household's income?
a. No
b. Yes
7) How long have you been a producer, packer, importer, or broker in the beekeeping
industry?
$\qquad$
8) Which income category best describes the annual gross income for all wage earners in your immediate family living with you last year? (Please circle ONE
response.) response.)

| a. | Less than $\$ 9,999$ |  |  |
| :--- | :--- | :--- | :--- |
| b. | $\$ 10,000$ to $\$ 19,999$ | f. | $\$ 100,000$ to $\$ 149,999$ |
| c. | $\$ 20,000$ to $\$ 39,999$ | g. | $\$ 150,000$ to $\$ 199,999$ |
| d. | $\$ 40,000$ to $\$ 69,999$ | h. | $\$ 200,000$ to $\$ 499,999$ |
| c. | $\$ 70,000$ to $\$ 99,999$ | i. | $\$ 500,000$ to $\$ 1,000,000$ |
|  |  | j. | Over $\$ 1,000,000$ |

9) How old were you on your last birthday?

10) Are you:
a. Female
b. Male
11) How long did it take you to complete this questionnaire?
$\qquad$

## Appendix: National Survey Instrument (continued)

## SECTION F. YOUR COMMENTS

Is there anything else that you would like to tell us about your operation? If you do, please use the space below for that purpose.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Do you have any comments about this survey in general, as well as any of its specific sections or questions? We would appreciate your comments to help us learn more about issues important in identifying the needs and current economic status of the honey industry.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Appendix: National Survey Instrument (continued)

If you have any questions regarding this study or this questionnaire, please contact:
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(607) $255-4489$

THANK YOU FOR YOUR COOPERATION. PLEASE MAIL THIS QUESTIONNAIRE TO US IN THE ENCLOSED POSTAGE PAID ENVELOPE

| No. 92-02 | An Overview of NEMPIS: National Economic Milk Policy Impact simulator | Harry M. Kaiser |
| :---: | :---: | :---: |
| No. 92-03 | Milk Quality Incentives for Dairy Farm Employees: A Motivational Approach | Thomas R. Maloney |
| No. 92-04 | An Integrated Approach to Modeling Price Volatility in the Live Cattle Futures Market | Kevin J. Evans Deborah H. Streeter Michael A. Hudson |
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| No. 92-09 | From Ecology to Economics: The Case Against CO2 Fertilization | Jon D. Erickson |
| No. 92-10 | Rates and Patterns of Change in New York Dairy Farm Numbers and Productivity | Stuart F. Smith |
| No. 92-11 | An Economic Analysis of the U.S. Honey Industry: Survey Sample and Mailing | Lois Schertz Willett |


[^0]:    a. Distributing recipes using honey
    b. Giving demonstrations/Setting up Displays
    (e.g. county fairs, flea markets, grocery stores, bazaars etc.)
    c. Distributing honey information
    d. Distributing free samples
    c. Publishing newspaper articles
    f. Maintaining observation hive
    g. Contributing to the National Honey Board
    h. Other (Please Specify)
    $\qquad$
    i. Did nor participate during 1988

[^1]:    Please continue with Section D, Page 21.

[^2]:    i. $\quad \$ 100,000$ to $\$ 149,999$
    j. $\$ 150,000$ to $\$ 199,999$
    k. $\$ 200,000$ to $\$ 499,999$
    i $\quad \$ 200,000$ to $\$ 499,999$
    m. $\$ 1,000,000$ to $\$ 1,499,999$
    n. $\$ 1,500,000$ to $\$ 1,999,999$
    o. $\$ 2,000,000$ or more

